



Nehru Yuva Krida & Sanskrutik Mandal, Chikhli's

GAWANDE COLLEGE OF PHARMACY

Lavala Road, Sakharkherda, Tq. Sindkhed Raja, Dist. Buldana (M.S.) - 443202

Phone : 07264-266212 Email :- gcpkherda@gmail.com Website : www.gawandecollegeofpharmacy.org.in

Prof. N. S. Gawande
Secretary
Mob. 9822364082

2018-2019

Sr. No .	Name of the award	Sponsorer	Prize	Subject/ Event	Name of the award Winner
1	GPC Award	Jaunjel Sir	Cash 500Rs	Human Anatomy and Physiology-I	KADAM PRAJWAL PRAVINRAO
2	GPC Award	Sanap madam	Cash 500Rs	Pharmaceutical Analysis-I	RAKHONDE PAVAN BABURAO
3	GPC Award	Thakre madam	Cash 500Rs	Pharmaceutics-I	GAWANDE CHETAN SHRIKRUSHNA
4	GPC Award	Pawar sir	Cash 500Rs	Pharmaceutical Inorganic Chemistry	DESHMUKJ AMAR RAJESHWAR
5	GPC Award	Wagh sir	Cash 500Rs	Communication Skills	CHAVAN VAIBHAV KISHANRAO
6	GPC Award	Giri madam	Cash 500Rs	Remedial Biology	BANDGAR SANGRAMSHING RAJENDRA
7	GPC Award	Patil sir	Cash 500Rs	Remedial Mathematic	SARODE SOHA SUSHANT
8	GPC Award	Kale sir	Cash 500Rs	Human Anatomy and Physiology-I	RATHOD RAHUL RAM
9	GPC Award	Sanap madam	Cash 500Rs	Pharmaceutical Analysis-I	KU NARWADE PUNAM SUBHASH
10	GPC Award	Thakre madam	Cash 500Rs	Pharmaceutics-I	KU AMBHORE SHUBHANGI GAJANAN
11	GPC Award	Pawar sir	Cash 500Rs	Human Anatomy and Physiology-I	KU NAVTHALE VAISHNAVI KAILAS
12	GPC Award	Wagh sir	Cash 500Rs	Pharmaceutical Analysis-I	KU THAKARE VAISHNAVI NARAYAN
13	GPC Award	Giri madam	Cash 500Rs	Pharmaceutics-I	KU KAKAD ASHVINI ARUN



PRINCIPAL

Gawande College of Pharmacy
(PG DMLT), Sakharkherda
Tq. S. Raja, Dist. Buldana



Nehru Yuva Krida & Sanskrutik Mandal, Chikhli's

GAWANDE COLLEGE OF PHARMACY

Lavala Road, Sakharkherda. Tq. Sindkhed Raja, Dist. Buldana (M.S.) - 443202

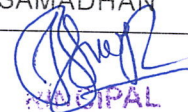
Phone : 07264-266212 Email :- gcpkherda@gmail.com Website : www.gawandecollegeofpharmacy.org.in

Prof. N. S. Gawande
Secretary
Mob. 9822364082

2019-2020

Sr. No .	Name of the award	Sponsorer	Prize	Subject/ Event	Name of the award Winner
1	GPC Award	Jaunjil Sir	Cash 500Rs	Human Anatomy and Physiology-I	Ku MURKUT SHIVKANYA RAJENDRA
2	GPC Award	Sanap madam	Cash 500Rs	Pharmaceutical Analysis-I	MORE HARSHAL SANTOSH
3	GPC Award	Thakre madam	Cash 500Rs	Pharmaceutics-I	BAKALE VAIBHAV VIRENDRA
4	GPC Award	Pawar sir	Cash 500Rs	Pharmaceutical Inorganic Chemistry	Ku JAIWAL SHIVANI ANIL
5	GPC Award	Wagh sir	Cash 500Rs	Communication Skills	SHAIKH SAMEER SHAIKH ZULKARNAIN
6	GPC Award	Giri madam	Cash 500Rs	Remedial Biology	GIRI GANESH RAMESH
7	GPC Award	Patil sir	Cash 500Rs	Remedial Mathematic	Ku RAJANE VIPASHYANA RAJENDRA
8	GPC Award	Kale sir	Cash 500Rs	Human Anatomy and Physiology-I	BORKAR PAWAN DINKAR
9	GPC Award	Sanap madam	Cash 500Rs	Pharmaceutical Analysis-I	PAWAR MANGESH SANJAY
10	GPC Award	Thakre madam	Cash 500Rs	Pharmaceutics-I	BONDRE KOMAL SAMADHAN




PRINCIPAL

Gandhiji College of Pharmacy
(PG DMLT), Sakharkherda
Tq. S. Raja, Dist. Buldana



Nehru Yuva Krida & Sanskrutik Mandal, Chikhli's

GAWANDE COLLEGE OF PHARMACY

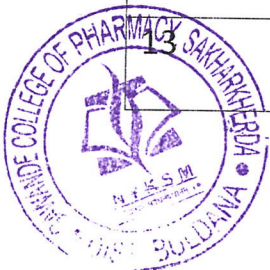
Lavala Road, Sakharkherda, Tq. Sindkhed Raja, Dist. Buldana (M.S.) - 443202

Phone : 07264-266212 Email :- gcpkherda@gmail.com Website : www.gawandecollegeofpharmacy.org.in

Prof. N. S. Gawande
Secretary
Mob. 9822364082

2020-2021

Sr. No .	Name of the award	Sponsorer	Prize	Subject/ Event	Name of the award Winner
1	GPC Award	Jaunjil Sir	Cash 500Rs	Human Anatomy and Physiology-I	KAKDE ANIL BHANUDAS
2	GPC Award	Sanap madam	Cash 500Rs	Pharmaceutical Analysis-I	JAWANJAL PRATIKSHA BHAGWAN
3	GPC Award	Thakre madam	Cash 500Rs	Pharmaceutics-I	DUNGU PRATHMESH RAJESH
4	GPC Award	Pawar sir	Cash 500Rs	Pharmaceutical Inorganic Chemistry	PATHAN ROSHANKHA JANGESHKHA
5	GPC Award	Wagh sir	Cash 500Rs	Communication Skills	SAKHARKAR SUDHANSHU RAVINDRA
6	GPC Award	Giri madam	Cash 500Rs	Remedial Biology	MAHEWISH FATEMA SHAIKH WAHEED
7	GPC Award	Patil sir	Cash 500Rs	Remedial Mathematic	KALE ANKITA BHAGWAN
8	GPC Award	Kale sir	Cash 500Rs	Human Anatomy and Physiology-I	BORKAR ASHWINI SHARAD
9	GPC Award	Sanap madam	Cash 500Rs	Pharmaceutical Analysis-I	BHOPLE TEJAS PRALHAD
10	GPC Award	Thakre madam	Cash 500Rs	Pharmaceutics-I	DHANGAR SURAJ LIMBAJI
11	GPC Award	Pawar sir	Cash 500Rs	Human Anatomy and Physiology-I	AKANKSHA DILIP THIGALE
12	GPC Award	Wagh sir	Cash 500Rs	Pharmaceutical Analysis-I	DEORE VISHAL SANJAY
13	GPC Award	Giri madam	Cash 500Rs	Pharmaceutics-I	KALE RUTIK KISHOR



Gawanade College of Pharmacy
(PG DMLT), Sakharkherda
Tq. S. Raja, Dist. Buldana



Nehru Yuva Krida & Sanskrutik Mandal, Chikhli's

GAWANDE COLLEGE OF PHARMACY

Lavala Road, Sakharkherda. Tq. Sindkhed Raja, Dist. Buldana (M.S.) - 443202

Phone : 07264-266212 Email :- gcpkherda@gmail.com Website : www.gawandecollegeofpharmacy.org.in

Prof. N. S. Gawande
Secretary
Mob. 9822364082

2021-2022

Sr. No .	Name of the award	Sponsorer	Prize	Subject/ Event	Name of the award Winner
1	GPC Award	Jaunjal Sir	Cash 500Rs	Human Anatomy and Physiology-I	VAIBHAV RAMDAS INGLE
2	GPC Award	Sanap madam	Cash 500Rs	Pharmaceutical Analysis-I	SHIVDAS VILAS UGALE
3	GPC Award	Thakre madam	Cash 500Rs	Pharmaceutics-I	SHIVANI LUDDHAV PARIHAR
4	GPC Award	Pawar sir	Cash 500Rs	Pharmaceutical Inorganic Chemistry	PAVAN UDDHAV PAWAR
5	GPC Award	Wagh sir	Cash 500Rs	Communication Skills	SHEKH JUBER ISMAIL
6	GPC Award	Giri madam	Cash 500Rs	Remedial Biology	SANDIP SANJAY SOLANKE
7	GPC Award	Patil sir	Cash 500Rs	Remedial Mathematic	VIKRANT SLHIVAJI SIRSAT
8	GPC Award	Kale sir	Cash 500Rs	Human Anatomy and Physiology-I	ANKITA MUKUNDRAO MORE
9	GPC Award	Sanap madam	Cash 500Rs	Pharmaceutical Analysis-I	ASHWINI GOPICHAND RATHOD
10	GPC Award	Thakre madam	Cash 500Rs	Pharmaceutics-I	YOGITA BHAGWAT SHINGE
11	GPC Award	Pawar sir	Cash 500Rs	Human Anatomy and Physiology-I	SHRUTIKA CHANDRAKANT MURATKAR
12	GPC Award	Wagh sir	Cash 500Rs	Pharmaceutical Analysis-I	SHIVANI GANESH AMBHORE
13	GPC Award	Giri madam	Cash 500Rs	Pharmaceutics-I	MANISHA DIGAMBAR KARANGE



Principal
Gawande College of Pharmacy
(PG DMLT), Sakharkherda
Tq. S. Raja, Dist. Buldana



Nehru Yuva Krida & Sanskrutik Mandal, Chikhli's

GAWANDE COLLEGE OF PHARMACY

Lavala Road, Sakharherda. Tq. Sindkhed Raja, Dist. Buldana (M.S.) - 443202

Phone : 07264-266212 Email :- gcpkherda@gmail.com Website : www.gawandecollegeofpharmacy.org.in

Prof. N. S. Gawande
Secretary
Mob. 9822364082

2022-2023

Sr. No .	Name of the award	Sponsorer	Prize	Subject/ Event	Name of the award Winner
1	GPC Award	Jaunjil Sir	Cash 500Rs	Human Anatomy and Physiology-I	CHANKHORE ANUP VILAS
2	GPC Award	Sanap madam	Cash 500Rs	Pharmaceutical Analysis-I	JAYBHAYE ASHWINI SHANKAR
3	GPC Award	Thakre madam	Cash 500Rs	Pharmaceutics-I	DHOTE SANIKA SUNIL
4	GPC Award	Pawar sir	Cash 500Rs	Pharmaceutical Inorganic Chemistry	SHERE UMESH DINKAR
5	GPC Award	Wagh sir	Cash 500Rs	Communication Skills	CHANKHORE ANUP VILAS
6	GPC Award	Giri madam	Cash 500Rs	Remedial Biology	CHANKHORE ANUP VILAS
7	GPC Award	Patil sir	Cash 500Rs	Remedial Mathematic	JAYBHAYE ASHWINI SHANKAR
8	GPC Award	Kale sir	Cash 500Rs	Human Anatomy and Physiology-I	DHOTE SANIKA SUNIL
9	GPC Award	Sanap madam	Cash 500Rs	Pharmaceutical Analysis-I	SHERE UMESH DINKAR
10	GPC Award	Thakre madam	Cash 500Rs	Pharmaceutics-I	CHANKHORE ANUP VILAS
11	GPC Award	Pawar sir	Cash 500Rs	Human Anatomy and Physiology-I	JAYBHAYE ASHWINI SHANKAR
12	GPC Award	Wagh sir	Cash 500Rs	Pharmaceutical Analysis-I	CHANKHORE ANUP VILAS
13	GPC Award	Giri madam	Cash 500Rs	Pharmaceutics-I	JAYBHAYE ASHWINI SHANKAR



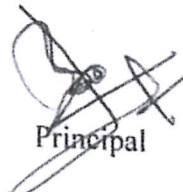
Principal
Gawande College of Pharmacy
(PG DMLT), Sakharherda
Tq. S. Raja, Dist. Buldana

GAWANDE COLLEGE OF PHARMACY, SAKHARKHERDA

LIST OF STUDENT UNDERGOING HEIGHER EDUCATION

Sr.No	Name Of Student	Year Of Passing	Nature Of Heigher Education
01	Miss. Meghana B. Pande		
02	Miss. Trushnali P. Metangle	2016	B.Sc
03	Miss. Shubhangi P. Metangle	2016	B.Sc
04	Miss. Komal M Ambhore	2016	B.Sc
05	Miss. Rohini P. Dhandar	2016	B.Pharm
06	Mr. Akash Pawar	2016	B.Pharm
07	Miss. Shital S Jadhao	2016	B.Pharm
08	Mr. Naveem Taria	2016	B.Pharm
09	Mr. Salman Khan	2016	B.Pharm
10	Miss. Bhardwaj Laxmi	2016	B.Pharm
11	Mr. Yogesh Shelke	2016	B.Pharm
12	Mr. Rahul Kankal	2016	B.Pharm
13	Mr. Pawan Khand	2016	B.Pharm
14			
15			


Placement Cell Incharge


Principal





Nehru Yuva Krida & Sanskrutik Mandal, Chikhli's

GAWANDE COLLEGE OF PHARMACY

Lavala Road, Sakharkherda, Tq. Sindkhed Raja, Dist. Buldana (M.S.) - 443202

Phone : 07264-266212 Email : gcpkherda@gmail.com Website : www.gawandecollegeofpharmacy.org.in

Prof. N. S. Gawande
Secretary
Mob. 9822364082

Ref No

Date : 26/08/23

प्रति,
जिल्हा युवा अधिकारी,
नेहरु युवा केंद्र, बुलढाणा.

विषय:- जिल्हा स्तरीय युवा महोत्सवामध्ये चमू सहभागी करून घेणेबाबत
संदर्भ- नेयुके/बुलडाणा/युवा महोत्सव/२०२३-२४/३७ दिनांक-१४-०८-२०२३

मा. महोदय,

उपरोक्त विषयान्वये जिल्हा स्तरीय युवा महोत्सवासाठी आमच्या महाविद्यालयातील १० विद्यार्थ्यांची चमू भाषण स्पर्धा, काव्यलेखन स्पर्धा व लोकनृत्य स्पर्धेसाठी पाठवीत आहोत कृपया सहभागी करून घेण्यात यावे, ही विनंती.



Principal
Gawande College of Pharmacy
Sakharkherda, Tq. Sindkhed Raja
Dist. Buldana (MH)

सोबत:-

1) विद्यार्थ्यांची यादी


26/8/23
51751137

Gawande College of Pharmacy, Sakharkherda

District Level Youth Festival 2023-24

List of Participant

Sr. No.	Name	Date of Birth	Adhar No.	Mobile No.
1	Ankita Bhagwan Kale	31/07/2002	936515097866	9145379728
2	Nita Gajanan Vibhute	05/07/2000	899021120384	9975067455
3	Samruddhi Pramod Sable	28/05/2003	695198132424	7219590239
4	Shivani Ganesh Ambhore	30/11/2002	913006891653	8637709734
5	Shraddha Suresh Patrikar	17/03/2003	324036980299	8080056037
6	Bhavika Ajay Wargat	05/05/2003	385737456558	9665055203
7	Vaishnavi Rameshwar Ghait	27/05/2003	299299361311	8767445031
8	Akanksha Dilip Thigale	27/04/2002	627580339970	9130780638
9	Rupali Punjaji Lodhe	02/01/2002	287720705323	9699183469
10	Aarti Rajendra Dabhekar	29/12/2003	653810128291	7820988286



Principal
Gawande College of Pharmacy
Sakharkherda, Tq. Sindkhed Raja
Dist. Buldana (MH)



नेहरू युवा केन्द्र बुलढाणा

Nehru Yuva Kendra Buldhana

युवा कार्यक्रम एवं खेल मंत्रालय, भारत सरकार
Ministry of Youth Affairs & Sports, Govt. of India

जिलास्तरीय युवा उत्सव २०२१-२२ DISTRICT LEVEL YOUTH FESTIVAL 2021-22

प्रमाणपत्र

This is to certify that Mr./Ms./Mrs यह प्रमाणित किया जाता है कि श्री./श्रीमती/शुश्री _____ निता _____ निभुते _____
_____ Resident of Village/निवासी _____ Block/तालुका _____ सिंदखेडराजा _____ District Buldhana/

जिला बुलढाणा Participated in- Young Artists-Camp- Painting- चित्रकला कार्यशाला-स्पर्धा/ young-Writers-Camp-Poem कविता-लेखन
कार्यशाला-स्पर्धा/Photography Workshop छसकचित्र-कार्यशाला-स्पर्धा/Declamation Contest-भाषण-स्पर्धा/Cultural Festival-Group events
सांस्कृतिक उत्सव (शमुह कार्यक्रम) / District Youth Convention - "INDIA@2047 YUVA-SAMAVAD" जिलास्तरीय-युवा सम्मेलन-"भारत@
2047- युवासंवाद" में शहभाग लिया है और secured _____ त्रप्रम _____ Position/स्थान प्राप्त किया।



जिला युवा अधिकारी
नेहरू युवा केंद्र बुलढाणा

जारी करी तिथी : 03/10/2022

Cert No: 1722

SANT GADGE BABA



AMRAVATI UNIVERSITY

CERTIFICATE
(INTER COLLEGIATE YOUTH FESTIVAL)

Awarded to **RUPALI P. LODHE**

Of 396 - GAWANDE COLLEGE OF PHARMACY, LAVALA ROAD, SAKHARKHERDA, TQ.
SINKHEDRAJA, DIST. BULDHANA

For participation in FOLK DANCE

As PARTICIPANT In the

SANT GADGE BABA AMRAVATI UNIVERSITY YOUTH FESTIVAL - 2022
held at SHRI SHIVAJI ARTS & COMMERCE COLLEGE, AMRAVATI

from 12-10-2022 to 15-10-2022

Date 14-11-2022

Chairman,
Board of Student's Development



Director,
Board of Student's Development

Cert No: 1722

SANT GADGE BABA



AMRAVATI UNIVERSITY

CERTIFICATE

(INTER COLLEGIATE YOUTH FESTIVAL)

Awarded to

RUPALI P. LODHE

Of

396 - GAWANDE COLLEGE OF PHARMACY, LAVALA ROAD, SAKHARKHERDA, TQ.
SINDKHEDRAJA, DIST. BULDHANA

For participation in

FOLK DANCE

As PARTICIPANT In the

SANT GADGE BABA AMRAVATI UNIVERSITY YOUTH FESTIVAL - 2022

held at SHRI SHIVAJI ARTS & COMMERCE COLLEGE, AMRAVATI

from 12-10-2022

to 15-10-2022

Date 14-11-2022

Chairman,

Board of Student's Development

Director,

Board of Student's Development



Cert No: 1722

SANT GADGE BABA



AMRAVATI UNIVERSITY

CERTIFICATE
(INTER COLLEGIATE YOUTH FESTIVAL)

Awarded to **RUPALI P. LODHE**

Of **396 - GAWANDE COLLEGE OF PHARMACY, LAVALA ROAD, SAKHARKHERDA, TQ.
SINKHEDRAJA, DIST. BULDHANA**

For participation in **FOLK DANCE**

As PARTICIPANT In the **SANT GADGE BABA AMRAVATI UNIVERSITY YOUTH FESTIVAL - 2022**
held at **SHRI SHIVAJI ARTS & COMMERCE COLLEGE, AMRAVATI**

from **12-10-2022** to **15-10-2022**

Date **14-11-2022**

Chairman,
Board of Student's Development

Director,
Board of Student's Development



Cert No: 1722

SANT GADGE BABA



AMRAVATI UNIVERSITY

CERTIFICATE
(INTER COLLEGIATE YOUTH FESTIVAL)

Awarded to **RUPALI P. LODHE**
Of **396 - GAWANDE COLLEGE OF PHARMACY, LAVALA ROAD, SAKHARKHERDA, TQ. SINDKHEDE RAJA, DIST. BULDHANA**
For participation in **FOLK DANCE**
As PARTICIPANT In the

SANT GADGE BABA AMRAVATI UNIVERSITY YOUTH FESTIVAL - 2022
held at **SHRI SHIVAJI ARTS & COMMERCE COLLEGE, AMRAVATI**

from **12-10-2022** to **15-10-2022**
Date **14-11-2022**

Chairman,
Board of Student's Development

Director,
Board of Student's Development



प्रति,

मा.संचालक,
विद्यार्थी विकास
संत गाडगे बाबा अमरावती विद्यापीठ
अमरावती

विषय: कलावंतांचे ओळखपत्र सादर करण्याबाबत..
महोदय,

उपरोक्त विषयान्वये कळविण्यात येते की, Gawande College of Pharmacy, Sakharke
या महाविद्यालयातील खालील नमुद कलावंतांनी युवा महोत्सव २०२२ मध्ये प्रत्यक्ष सहभाग घेतलेला असून
परिक्षकांद्वारे ओळखपत्रांवर आवश्यक असलेली मुद्रा अंकित करून सोबतचे नस्तीमध्ये (फाईलमध्ये) संकलित करून
एकत्रितरित्या आपल्या निर्देशान्वये नोंदणीचे स्थळी आज दिनांक 15/10/22 रोजी एकुण 19
इतक्या कलावंतांचे ओळखपत्र सादर करण्यात येत आहे. त्यानुसार कृपया खात्री करून पौघ देण्यात यावी, ही
विनंती.

आपला/आपली

(संघ व्यवस्थापक)

पुर्ण नांव: Aslam Pathan

महाविद्यालयाचे नांव: Gawande colly. of Pharmacy.

भ्रमणध्वनी क्र.: 8669003981.

(या प्रपत्रामध्ये व्यावसायिक साधीदारांची नांवे नमुद करू नये)

1.	Ankita .B. kale	20
2.	Shradddha .S. Pattnaikar	21
3.	Banika .A. Warghat	22
4.	Yogita D. Chyav	23
5.	Akanksha D. Thigale	24
6.	Prachi S. Madke	25
7.	Ragini R. Mahad	26
8.	Rupali P. Lodhe	27
9.	Nita G. vibute	28
10.	Shivani G. Ambhore	29
11.	Mahesh V. Shaikh	30
12.	Saba .Sammam I Khan	31
13.	Shiba Z. Shulkh Talil.	32
14.	Anish K. Deshmukh	33
15.	Prakash Fundakor.	34
16.	Praveen S. Magar	35
17.	Anesh Kharat	36
18.	Anisha J. Dhangar	37
19.	Pavan More	38

संघ व्यवस्थापक

संघ व्यवस्थापिका

39	Aslam Pathan	40	Miss. Mayuri kale.
----	--------------	----	--------------------

(टिप: १) कोणते पौघ वाढविल्याची नोंद संघ व्यवस्थापकांनी सोबत आणाव्यात २) पिक रकामांमध्ये प्रत्यक्षात सहभागी झालेल्या
कलावंतांचाच उल्लेख करावा. ३) सर्व कलावंतांची ओळखपत्रे एकत्रितरित्या अनुक्रमे सादर त्यावर वा प्रपत्राची एक प्रत व्यवस्थानी सादर
करून पौघ व संकलित ओळखपत्रे एका नस्तीत नस्तीबद्ध करून त्यावर महाविद्यालयाचे नांव व संकेतिक ठळकपणे नमुद करून
महाविद्यालयाचे संघणी कक्षाकडे महोत्सवावरच्या निवारणे पाठवावे.)



Keer/Book
15/10/22



नेहरू युवा केंद्र बुलढाणा

Nehru Yuva Kendra Buldhana

युवा कार्यक्रम एवं खेल मंत्रालय, भारत सरकार

Ministry of Youth Affairs & Sports, Govt. of India

जिल्लास्तरीय युवा उत्सव २०२१-२२

DISTRICT LEVEL YOUTH FESTIVAL 2021-22

प्रमाणपत्र

This is to certify that Mr./Ms./Mrs यह प्रमाणित किया जाता है कि श्री./श्रीमती/शुश्री

निता विभुते

Resident of Village/निवासी

Block/तालुका

सिंदखेड राजा

District Buldhana/

जिला बुलढाणा Participated in- Young Artists-Camp- Painting- चित्रकला कार्यशाला-स्पर्धा/ young-Writers-Camp-Poem कविता-लेखन

कर्मशाला-स्पर्धा/Photography Workshop छायाचित्र कर्मशाला-स्पर्धा/Declamation Contest-भाषण स्पर्धा/Cultural Festival-Group events

सांस्कृतिक उत्सव (समूह कार्यक्रम)/District Youth-Convention - "INDIA @-2047 YUVA-SAMAVAAD" जिसमें स्वीय युवा सम्मेलन- 'भारत @

2047- युवा-संवाद" में सहभाग लिया है और and secured

सप्रम

Position/स्थान प्राप्त किया।

जारी करी तिथि : 03/10/2022



जिला युवा अधिकारी
नेहरू युवा केंद्र बुलढाणा

१२-१६

नेहरू युवा केन्द्र बुलढाणा

Nehru Yuva Kendra Buldhana

युवा कार्यक्रम एवं खेल मंत्रालय, भारत सरकार

Ministry of Youth Affairs & Sports, Govt. of India

जिलास्तरीय युवा उत्सव २०२१-२२

DISTRICT LEVEL YOUTH FESTIVAL 2021-22

प्रमाणपत्र

This is to certify that Mr./Ms./Mrs यह प्रमाणित किया जाता है कि श्री./श्रीमती/शुश्री _____ नितानि निशुते

_____ Resident of Village/निवाशी _____ Block/तालुका सिंदखेड राजा _____ District Buldhana/

जिला बुलढाणा Participated in-Young Artists-Camp- Painting- चित्रकला कार्यशाला-स्पर्धा/ young Writers-Camp-Poem कविता-लेखन

कार्यशाला-स्पर्धा/Photography Workshop छसचित्रकार्यशाला-स्पर्धा/Declamation Contest भणनस्पर्धा/Cultural Festival-Group events

सांस्कृतिक उत्सव (समुह कार्यक्रम)/District Youth Convention- "INDIA @ 2047 YUVA-SAMAVAAD" जिलास्तरीय-युवा सम्मेलन="भारत @

2047-युवा-संवाद" में सहभाग लिया है और and secured _____ प्रथम _____ Position/स्थान प्राप्त किया।



जिला युवा अधिकारी
नेहरू युवा केंद्र बुलढाणा

जारी करी तिथी : 03/10/2022



नेहरू युवा केन्द्र बुलढाणा

Nehru Yuva Kendra Buldhana

युवा कार्यक्रम एवं खेल मंत्रालय, भारत सरकार

Ministry of Youth Affairs & Sports, Govt. of India

जिलास्तरीय युवा उत्सव २०२१-२२
DISTRICT LEVEL YOUTH FESTIVAL 2021-22

प्रमाणपत्र

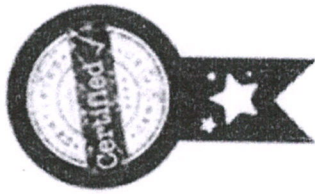
This is to certify that Mr./Ms./Mrs यह प्रमाणित किया जाता है कि श्री./श्रीमती/शुश्री _____ निता _____ निभुते _____
Resident of Village/निवासी _____ Block/तालुका _____ सिंदखेड राजा _____ District Buldhana/
जिला बुलढाणा Participated in- Young Artists Camp - Painting- चित्रकला कार्यशाला-स्पर्धा/ young-Writers-Camp-Poem कविता-लेखन
कार्यशाला-स्पर्धा/Photography Workshop छससचित्र-कार्यशाला-स्पर्धा/Declamation Contest-भाषण स्पर्धा/Cultural Festival-Group events
सांस्कृतिक उत्सव (समूह कार्यक्रम)/District Youth Convention - "INDIA @ 2047 YUVA SAMAVAAD" जिसास्वसीय-युवा सम्मेलन-"आस्व @
2047- युवा-संवाद" में सहभाग लिया है और secured _____ तयस _____
Position/स्थान प्राप्त किया।

जारी करी तिथी : 03/10/2022



०२/१०

जिला युवा अधिकारी
नेहरू युवा केंद्र बुलढाणा



Certificate of Publication



IJPRA Journal

This is to confirm that

Sahilsingh Ravindra singh Pardeshi, Shruti Dattatraya Chaudhari, Gauri Vijay
Sonar

Published following article

Effect Of Kanchnar Guggul, Flaxseeds And Spearminnto Reduce Testosterone
Level In Pcos And Pcod

Volume 8, Issue 4, pp: 989-997

www.ijprajournal.com

A Peer Reviewed and refereed Journal

International Journal of Pharmaceutical Research
and Applications

ISSN: 2249-7781

Publication Head





Date :24 January 2023

Kiran rajesh wadatkar

At-pokhari,post-hiwara bk, tq -mehkar ,d

Pune-411014

Sub: Employment Letter

Dear Kiran,

With reference to your application and subsequent interactions we are pleased to offer you an Employment as **Executive** in the **Operations** with **CONNEQT Business Solutions Limited** (The Company) with effect from **24 January 2023** on the following terms and conditions.

You will be paid an Annual Gross Salary of INR. **227682.00** In addition to the above, you will be covered under PF, ESI, Bonus, Gratuity etc., if applicable as per law. Based on the present applicability your annual CTC would be Rs **268750.0** This may undergo change in view of the changes in the laws. Detailed break-up of the monthly and annual CTC is annexed to this letter as annexure A

Please note that the information pertaining to remuneration and benefits payable to you is **CONFIDENTIAL** and should not be shared with anyone other than the authorized representative(s) of the Company.

The above mentioned offer shall be valid if you join us on **24 January 2023**. Should you have any further queries, please feel free to contact our Recruitment Team.

You will initially be posted at our **Pune - Kalyaninagar** Office. The Company may transfer your services to any of the existing office(s)/ department(s) / division(s) / Section(s) / establishment(s) of the Company including any of its subsidiaries / holding / associate company or that may come into existence in the future in India or abroad. Your transfer shall be governed by the Company's Transfer Policy and Regulations, as may be in force from time to time.

You will be working on flexible timings as may be decided by the Company.

Your joining shall be subject to submission of copies of testimonials (originals to be presented):

1. Academic qualification certificates (Matriculation onwards) including proof of date of birth and professional proficiency certificates, where applicable
2. Experience certificate(s), Relieving letter/ Clearance certificate, from your previous employer(s), as applicable. (Relieving letter is a must)
3. PAN Card and Aadhar Card
4. Cancelled Cheque





You will be on probation for a period of six months from the date of your joining the Company, post which you will be deemed confirmed unless you receive an extension of probation in writing. During Probation period your notice period would be for **15** days prior notice by either side.

Upon completion of Probation period; your employment with the Company can be terminated upon 30 Days prior notice by either side. However, the Company reserves the right to, at its sole discretion; substitute the **30** days prior notice by paying you salary for **30** days in lieu thereof. Though if not certified during the training period the company has the complete rights to terminate the employment without any prior notice. Your termination/ resignation letter, (by whatever name called) will be accepted by the Company only on your satisfying the **30** days notice period as stated in this Clause. Further, till such time as the Company accepts your separation & relieves you of the responsibilities, you will be deemed to be an employee of the Company and the terms and conditions of your employment shall continue to bind you.

In the event of separation, for any reason whatsoever, within a period of 12 months from your date of joining, all expenses incurred by company or reimbursed to you upon joining/ in connection with your joining shall be recovered from you. The company also reserves the right to recover the training expenses incurred.

This overrides all verbal commitments made. Please sign and return the duplicate copy of this letter in token of your acceptance of the terms described in this letter.

Looking forward to a mutually beneficial association.

Welcome once again and wishing you the best time ahead!!!

For **CONNEQT Business Solutions Limited.**

Tony Jacob Joseph

Associate Vice President - Human Resource

I accept the terms of this letter



Name Kiran Rajesh Wadatkar
Grade 1A
Designation Executive

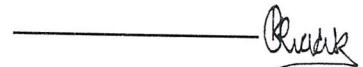
You will be entitled to the following remuneration effective your date of joining.

Component	Amount (Rs) Per Month	Amount (Rs) Per Year
A. Fixed Pay		
Basic Salary	7839.00	94063.00
House Rent Allowance	4703.00	56436.00
Other Allowance	4878.00	58536.00
Advance Statutory Bonus	1134.00	13608.00
B. PERFORMANCE INCENTIVE: This will be payable on a monthly basis. The payout shall vary from 0% to 150% based on your PMI Rating. There would be no payout during the training period. The details of the policy will be communicated to you separately.		
PERFORMANCE INCENTIVE @ Meeting Expectation(100%)	1120.00	13440.00
C. MONTHLY GROSS (A+B)	19674.00	236083.00
D. BENEFITS		
PROVIDENT FUND - Company Contribution (As per the PF Act; 12% of salary components specified by PF authorities and it will be paid to PF Department towards Company's Provident Fund Contribution. As per the act, you will contribute the same amount as employee contribution)	1526.00	18312.00
GRATUITY (As per the Gratuity Act. This amount will go towards the gratuity fund and will be paid to you on completion of 5 years with the company)	377.00	4524.00
ESI - Company Contribution (As per the ESI Act, company shall contribute 3.25% of your monthly gross for ESI. This amount is directly linked to your monthly gross and may hence vary. As per the act, 0.75% of your monthly gross will be recovered towards you.	639.00	7668.00
Insurance (You will be covered under insurance as per the company policy and can change as per the management discretion)	180.00	2160.00
E. TOTAL COST TO COMPANY (C + D)	22396.00	268750.00
F. Employee Contribution		
PROVIDENT FUND - Employee Contribution (As per the PF Act; 12% of salary components specified by PF authorities and it will be paid to PF Department towards Company's Provident Fund Contribution. As per the act, you will contribute the same amount as employee contribution)	1526.00	18312.00
ESI -Employee Contribution (As per the ESI Act, employee shall contribute 0.75% of your monthly gross for ESI. This amount is directly linked to your monthly gross and may hence vary. As per the act, 0.75% of your monthly gross will be recovered towards you.)	148.00	1771.00

Provident Fund contribution will be recovered from (Dearness Allowance+Other allowance+Food coupons+ Education allowance + Special allowances if any. Contribution is limited to Rs. 15000/- wages as stipulated under Provident Fund Act.




I accept the terms of this letter





Terms and Conditions of Employment

This appointment is subject to your not being a partner or relative of a Director of the Company within the meaning of Section 314 of the Indian Companies Act, 1956. Should any such relationship exist, you will bring forth the same to our notice immediately and we shall intimate to you the necessary approvals/ permissions required for your employment. In such an event you will be able to join the company only after all permissions/ approvals are obtained.

As an employee, you will be privy to sensitive and commercially valuable information concerning company and business. Such information is deemed to be the property of the company, and must not be disclosed during or after this employment to any third party without prior written consent of the company. Hereby, you undertake to indemnify the company and its affiliates from any loss or damage arising from any breach of this undertaking.

You are forbidden to engage yourself in any other trade, or profession directly or indirectly and whether for gainful purpose or otherwise. Should you wish to pursue academic advancement, you will have to obtain a written permission for the same and ordinarily it shall be allowed provided it does not adversely affect your work-place responsibilities/ discharge of duties.

Please note that in the event of misconduct on your part, including but not limited to absenting yourself without prior sanctioned leave or harassment (sexual or otherwise) meted out to any other employee, the company may terminate your employment. Please note that if the employment is terminated on account of disciplinary action against you, the clause relating to 30 Days' notice period is not applicable.

During the period of your employment inventions, creations, discoveries, patents, copyrights, shall become the property of the Company. You will not have any right to claim the ownership of it and assign the same to the Company.

Your appointment is contingent upon successful completion of Background verification. The background checks are not restricted to education and employment but to all aspects as per the appropriate selection procedure. Please note that furnishing of false information or suppressing any facts is a disqualification for employment in this Company. Should such an act come to our notice at any time during the period of your employment in the Company, your services will be liable to be terminated with immediate effect.

You will superannuate from the services of the company on attaining the age of 58 years without any notice whatsoever from the company in this behalf.

The above-mentioned does not purport to be exhaustive employment terms. You will be governed by the rules and regulations laid by the company from time to time. The afore mentioned terms and other rules & regulations shall remain current and binding until you are separated from the Company by way of a written agreement/ letter issued to you.

This overrides all verbal commitments made. Please sign and return the duplicate copy of this letter in token of your acceptance of the terms described in this letter. Should there be any dispute with regard to the terms stipulated herein, the same shall be resolved in accordance with the laws of India and any dispute/ reference to this shall be dealt at Hyderabad (Telangana) under the exclusive jurisdiction of the Courts of India.

I have read through the above terms and conditions of employment and hereby accept.

Name:

Signature:

Date:



Ref. No.: APT / Algrow / 874054

Date: 24/01/2022

LETTER OF APPOINTMENT

Name of the Establishment : Alembic Pharmaceuticals Ltd
Address : Alembic Road, Vadodara-390003
Name of the employer : Alembic Pharmaceuticals Ltd
Name & address of Sales employee : **Mr. Amol Ganeshrao Lomte**

Hingoli , Maharashtra - 431701

With reference to your application and subsequent interview you had with us, We are pleased to put you as **Channel Development Manager**, for our **Algrow** division based at **Nanded** as your Head Quarter with effect from **24/01/2022** on the following terms & conditions:

1. You will draw salary and allowances as stated in the Annexure A.
2. You will be on probation for a period of 6 months from the date of your joining the Company. On successful completion of Probation Period, you will be confirmed in writing in the services of the Company. However, the period of Probation maybe extended or curtailed based on your performance. Your performance shall be evaluated at regular intervals and in case you do not reach the expected levels of performance, the Company reserves the right to terminate your services.
3. You will be entitled to the working allowance and travelling fare as per the Company's policy applicable to your cadre. Please note that the allowances do not form part of the salary.
4. Your services may be transferred from one Headquarter, Region and division to another based on exigencies of business at the discretion of management. You are also liable to be transferred to any department / division / establishment of the company at any location in India without payment of any additional compensation, to meet with any exigencies of business at the sole discretion of Management.
5. Your Probation period shall automatically come to an end on completion of a period of Six Months or the extended period, if any. Also your services may be terminated without assigning any reason whatsoever, by giving you one month's notice in writing or paying you one month's basic salary in lieu of notice. Should you desire to leave the Company's service, you will be required to give one month's notice in writing to the Company.
6. You will be retired or superannuated from the services of the division on completion of 58 years of age. The date of birth as declared by you verified at the time of your employment will be reckoned final for this purpose.
7. You will discharge your duties as per the instruction and guidance given by your superiors and Management from time to time.



8. Your appointment shall be subject to Company rules and regulations in force now and that may come into force from time to time and such acts or laws and regulations as are applicable and are in force now and/or any such modifications or enactments that may come into force from time to time.
9. You shall inform of your monthly tour plan well in advance to your Superior and shall intimate immediately in writing to your superior about any changes in the same with reasons. You will inform your Superior whenever you leave/return to your headquarters. You shall submit daily reports, account of samples and its distribution in appropriate forms available for the same.
10. Your hours of work are not fixed, but you shall work in the manner and as per timings followed generally by all field employees. Further, you will be required to travel extensively on Company's business which may extend to several weeks continuously.
11. During the continuance of your employment, you will not accept any part-time or full-time employment in any Organization whether with or without remuneration. You will also not pursue any educational/vocational courses part time or full time without prior permission of the Company.
12. You will be entitled to leave with pay in accordance to and the rules framed by the company and any other rules that may be in force from time to time. The granting of leave will depend upon the exigencies of work and will be at the sole discretion of the Company. If you remain absent without prior permission or intimation for a consecutive period of ten days or more your services shall be liable for termination without notice or appropriate disciplinary procedure will be initiated accordingly.
13. You will inform the Management in writing of any change in your residential address and family status at the earliest. On failing to do so, all communications intended to be served on you would be sent to your last address as per our records and this shall be deemed to have been served on you.
14. You shall conduct yourself soberly and carry out diligently and faithfully all the instructions given to you by your superiors in connection with the Company's business and to the best of your skills and ability to improve and further the business and interest of the Company.
15. You shall not either during the continuance of your services or thereafter disclose, divulge, or make public or use any information / knowledge which you may acquire during the period of your services in any way about any of the affairs or secrets of the Division, Company or any processes, accounts, transactions and dealings of the Division, Company to any person, firm or Division, Company to the prejudice of organization.
16. You are required to devote your full time attention and efforts to the furtherance of the business of the Division of the Company and to continually develop your professional skills in your own and Division's mutual interests. You shall not during your services with the Division directly or indirectly engage yourself in or devote attention to any full time, part time training or business or monetary position other than that of the Division. You shall be true and faithful to the Division in all dealings and transactions relating to the Division's business.



17. You shall not accept or take any presents, commissions, or any kind of gratification in cash or kind from any person, party, firm or concern having dealings with the Company and if you are offered any, you should immediately report the same to the Company in writing. You shall not lend money to or borrow money from customers and suppliers of the Company.
18. You will be responsible for the safe keeping and return in good condition Company's articles and property which may be in your custody, care or charge. The Company shall have the right to deduct the money value of such Company property from your dues and take such other actions deemed proper in the event of your failure to account for such property to the satisfaction of the Management.
19. In event of sickness preventing you from satisfactory performance of your duties over a long period, the Company reserves the right to evaluate and terminate your employment or vary the terms and conditions over a given period.
20. During the continuance of your employment, if you become physically or mentally unfit to work and if the Company has satisfied itself of this fact on advice of proper medical authorities, the Company is entitled to terminate your services.
21. In event of termination or resignation, you shall handover all the documents and papers, keys and other property of the Company as may be in your custody, care or charge to immediate superiors and obtain a clearance certificate from him.
22. In case you are absent from your assigned duties for more than ten days at a stretch without prior written approval of your Superior, appropriate action will be initiated accordingly. Absence from your assigned duties for the purposes of this clause would also include not following the rules and procedures of our Company for submission of the daily, monthly or other prescribed reports.
23. Any instance of misconduct, breach of any of the clauses, rules and regulations governing your engagement, neglect of your duties, insubordination, riotous behaviour, insolence, absence from duty without prior sanction, dishonesty, embezzlement and accepting any commission or discount from any merchant or outsiders or such behaviour in contravention of traditional/ common during your services or if you are tried and/or convicted for any criminal offence, you shall be dealt with appropriately.
24. In the event of your being indulging in any acts or commission constituting misconduct, including unwelcome physical contact and advances and / or a demand or request for sexual favour and /or sexually coloured remarks/jokes, and /or showing pornography and / or any other physical, verbal or non-verbal conduct of a sexual nature, which will tantamount to an act of moral turpitude, you shall be dealt with appropriately.
25. Your appointment is subject to your medical fitness and retaining reasonable medical fitness during the tenure of your employment with the Company and as certified by the Doctor appointed by the Division for this purpose. The Division may require you to undergo medical checkup as and when required at the Division's cost by any Doctor/Doctor's nominated by the Division. If after such examination, the Division is of the opinion that continuance of your services is medically not advisable or that you are incapable of discharging your duties, the Division may discontinue your services forthwith without any notice.
26. In case of any dispute or difference arises out of or in connection with your engagement, including any further terms and conditions that may be laid down from time to time, it shall be subject to the exclusive jurisdiction of the appropriate Courts, Tribunals and/ or Authorities in the city of Vadodara.



27. You shall submit your reports and required information regularly to your superiors as per the Rules and Policy of the Company in such prescribed format from time to time. You shall undertake to adhere to such schemes/procedures like Cell Phone Reporting or such other method of reporting as the Company decides as per the requirements and as per the exigencies of the business.

We welcome you in our Organisation and look forward to your long and fruitful association with us.

For Alembic Pharmaceuticals Ltd ,



Chitra Shetty

Deputy General Manager – Human Resource

I have read and understood all the terms and conditions of appointment and I shall abide by them in toto.

Place :

Date :

(Signature)

ALEMBIC PHARMACEUTICALS LIMITED

REGD. OFFICE : ALEMBIC ROAD, VADODARA - 390 003. • TEL : (0265) 2280550, 2280880 • FAX : (0265) 2281229
website : www.alembicpharmaceuticals.com • E-mail : alembic@alembic.co.in • CIN : L24230GJ2010PLC061123



ANNEXURE-A

24th Jan, 2022

ALEMBIC PHARMACEUTICALS LTD

NON METRO

ANNEXURE (Compensation Details)

Candidate Name : Mr. Amol Ganeshrao Lomte
Division : Algrow
HQ : Nanded
Designation : Channel Development Manager
DOJ : 24th Jan, 2022

Sr. No.	Salary Head	Amount(Rs.)	Frequency
1	Basic	11,917	Monthly
2	HRA	4,767	Monthly
3	Hospitalization Premium	699	Monthly
4	Kit Allowance	1,531	Monthly
5	PF (Company)	1,430	Monthly
6	Bonus	9000	Yearly
7	Gratuity	6878	Yearly
Annual CTC		260004	Yearly
Amount In Words: Rupees Two Lac Sixty Thousand Four Only.			



Chitra Shetty
Deputy General Manager-Human Resources

Notes :

1. Gratuity will be payable as per The Payment of Gratuity Act, 1982 and employee will be eligible for gratuity only after rendering 5 years of continuous service in organization.
 2. Payment of Bonus will be made as per The Payment of Bonus Act, 1965.
 3. There will be variation up to Rs. 12/- per annual in CTC due to rounding-off the monthly amount.
- Please sign duplicate copy of this appointment letter and send back to the authorized signatory as a token of your acceptance of the appointment on the terms and conditions mentions here in above.

Place :
Date :



(Signature)



Mankind

Serving Life

Appointment Letter

Date: 04-MAY-2022

To,
Mr. Ashwin Dilip Pakhan

Dear,

Based upon your application and subsequent interview, we are pleased to offer you the position for the post of **Senior Field Manager** in **Discovery Division (Sales division of Mankind Pharma Ltd.)** on the following terms and conditions:

1. **Date of Joining** : 04-MAY-2022
2. **Designation** : Senior Field Manager
3. **Department** : Sales
4. **HQ** : Chikhli
5. **COMPENSATION STRUCTURE:** You shall be placed in the appropriate band / responsibility level of the Company, and shall be entitled to compensation (salary and other applicable benefits) as governed by the rules of the Company on the subject, as applicable and/or amended hereafter. Please refer annexure-1 for detailed compensation structure.
6. **COMPANY RULES IN GENERAL:** You will be governed by the rules and regulation of the Company now in force and as revised from time to time.
 - a). The emoluments/benefits due to you shall be liable/ subject to tax in accordance with the provisions of the Income Tax Act and Rules made thereunder and any other legislation applicable in this regard and as may be in force from time to time.
 - b). In the matter of Provident Fund, E.S.I., Employees' Pension Scheme, Gratuity etc, you shall be governed by the Rules and regulations of the division and statutory provisions, if any, which are in force from time to time. Payment of Bonus (Including Special Bonus) is governed by Payment of Bonus Act 1965 as amended.
 - c). You shall be covered under Group Personal Accident Policy.
 - d). If at any time during the period of your employment you are found to be dishonest, disobedient, Intemperate, Irregular in attendance or at work or commit a breach of the terms of your employment, the Division shall not withstanding anything to the contrary that may be contained herein, be entitled to terminate your employment forthwith without any notice whatsoever or payment in lieu of notice and may deduct without prejudice to any of the rights and remedies which the Division may have against you from the emoluments, if any, then due to you, the amount of any loss the Division may have sustained has occurred shall be final, conclusive and binding upon you in all respects and shall not be questioned by you on any grounds whatsoever.

cont....2

FOR MANKIND PHARMA LTD.

Self-Attested



Discovery
Mankind
(A Marketing Division)

Ashwin
Authorised Signatory

Office: MANKIND PHARMA LIMITED, 208, Okhla Ind. Estate, Phase-3, New Delhi-110020
Ph: 011-46541382, 011-46541382, E-mail: contact@mankindpharma.com, www.mankindpharma.com
CIN No. U74899DL1991PLC044643



Mankind

-2-

Strong Life

In the event of your being found indulging in any acts of omission or commission constituting a misconduct including unwelcome physical contact and advances and/or a demand or request for sexual favours, and/or sexually coloured remarks/jokes, and/or showing pornography and/or any other physical, verbal or no-verbal Conduct of a sexual nature, which will tantamount to an act of moral turpitude, the Division has the right to suspend you, pending issue of charge sheet and inquiry and till its final disposal without any salary and allowance.

- e. For the purpose of counselling, you may be called upon to stop working in the field and attend counselling sessions by your superiors as and when called upon to do so or at H.O.
- f. You will be discharging your duties diligently and sincerely and will not divulge any secrets of the Division or its trade which may come to your knowledge during the course of your employment with the Division.
- g. You shall not publish or cause to be published any publication or contribute to any article or review to any newspaper, magazine or book, brochure or pamphlet or other publication in any way related to or concerning the Division's products or policies without prior clearance from the Division.
- h. You will not borrow or collect any money on Division's account from any dealer or doctor or other party. You shall not accept or undertake to accept either directly or indirectly any gift, commission or other favour of any kind whatsoever in connection with your work without the prior consent of the Division.
 - (i) You will undertake to adhere to such scheme/procedures as the Division may at its sole discretion introduce/withdraw/alter/modify from time to time.
 - (ii) You shall maintain normal disciplines and decorum while attending doctors, customers and in briefings, cycle meetings, etc.
 - (iii) In the event of your failure to fulfil all the above obligations, the Division shall be at liberty to treat you as absent from fieldwork unless all working reports are completed to the satisfaction of your superiors.
- i. Non-submission of DCR/non-submission of leave application/false reporting of calls in DCR and false claim through Tour Expense Statement is a serious misconduct which will render you liable for severe disciplinary action.
- j. It is ordinarily presumed that this contract of employment is renewed from time to time till you reach the age of superannuation on the understanding that your performance in the job is satisfactory and acceptable in all respects. You will be advised from time to time about your performance especially, if and when, it falls below satisfactory level. If the Management finds that you are incapable of performing the job/jobs assigned to you, in spite of best efforts on your part, the Management will be at liberty to terminate this contract of employment at any time on giving one month's notice or salary in lieu of such notice. In other words, it will be presumed that the contract has not been renewed from the date of such termination.
- k. You will be provided with necessary promotional material, identity/visiting cards, product literature, training manuals, stationery etc. In the event of your leaving the Division by way of resignation, retirement, termination or any reason whatsoever, you shall return all the Division's property in your possession such as and including printed stationery, unutilized samples, visual aids, detailing folders, guidebooks, promotional material, gadgets, detailing bag, identity cards, No Due Certificate from all stockiest, imprest, cash/advance, if any, and/or any other articles to the person nominated by the Division and your dues shall be settled only on receipt of the Division's property. In case, you fail to return the company's property including NO Dues Certificate, within 30 days from the date of relieving or the time prescribed under the applicable laws (whichever is less), the company shall recover the amount from your full and final settlement dues, without further reference / notice to you.

CONT..... 3

FOR MANKIND PHARMA LTD.

Self Attested:



Discovery
Mankind

(A Marketing Division)

PHARMA LIMITED, 208, Okhla Ind. Estate, Phase-3, New Delhi-110020
46541382. E-mail: contact@mankindpharma.com; www.mankindpharma.com
CIN No. U74899DL1391PLC044843

Authorised Signatory

- l. You shall neither assign nor pledge to third parties including Wholesalers/C&F Agents, any financial or other benefits to which you are entitled under the terms of the Offices Employment/ Agreement/ Contract with the Division.
 - m. If at any time, the Management is not in a position to provide you work for trade reasons or business exigencies you may be laid off from work for reasonable time without any leave or compensation.
 - n. If any question of interpretation of any terms/conditions of your appointment/employment arises, the Division decision shall be final and binding on you.
 - o. You are required to submit the following documents on or before your date of joining.
 - (i) Certificate in support of the qualifications mentioned by you in your application.
 - (ii) Certificate supporting your date of birth/School leaving certificate.
 - p. You shall communicate to the division if there is any change in your address as well as personal status. All communications sent to you in normal course at the address given shall be deemed to have been served on you.
7. **DOUBLE EMPLOYMENT:** You are not allowed to work in any other place / Office / area for any remuneration while working in company's service for full time, nor shall hold any business, directly or indirectly.
8. **RULE REGARDING CONFIRMATION:** You will not be deemed to be permanent in the services of the Company unless you are so confirmed in writing. The aforesaid period can stretch from six month to one year and can also be extended at the discretion of the company. During this period:
- I. If anything will be found unethical you will be terminated without any prior notice or without assigning any reason.
 - II. You will not be entitled for any leaves except sick leave for which you have to provide medical certificate, but in other cases leave availed shall be counted as leave without pay.
 - III. At the time of probation your performance will be under the review and if at any time it is found that your performance is unsatisfactory, your services can be terminated after giving you a notice period of 24 hrs.
9. **AREA OF ACTIVITY AND TRANSFER:** Your headquarter for the time being will be as mentioned. Such territory as may be assigned to you by the Management. You are liable to be transferred, without any additional compensation, to any Area/Territory, other division of company in India whether existing or formed in future as the Management may from time to time deem necessary at their sole discretion. Your refusal to such transfer or in case you fail to report for duties at the transferred place will be considered, as your unwillingness to serve the company, and in such case, Management will be free to terminate your services by giving 24 hrs notice, provided that no such notice shall be required to be given if your services are terminated when you are on training (probation).
10. **RETIREMENT:** Without prejudice to any other rules and regulation of the company and any laws, you shall retire from the service of the company on completion of 25 years or on attaining the age of 60 years, which could be advanced subject to you being medically or physically found unfit. Whichever is earlier your services shall stand terminated on account of superannuation of the day following on completion of 25 years or on attaining the age of 60 years, whichever is earlier however the management reserves its right to extend the period of retirement and it will be the sole discretion of the management. The date of your birth will be counted by your educational certificates given by you at the time of employment with the company and will be final and binding on you.

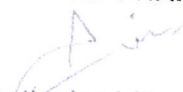
CONT..... 4
FOR MANKIND PHARMA LTD.

Self Attested: _____



Discovery
Mankind 

(A Marketing Division)


Authorised Signatory

MANKIND PHARMA LIMITED, 208, Okhla Ind. Estate, Phase-3, New Delhi-110020
Tel: 46541382 E-mail: contact@mankindpharma.com; www.mankindpharma.com
CIN No. U74899DL1991PLC041843



Mankind

-4-

Serving Life

11. **ROTATION POLICY:** In the course of service without any prejudice to any other Rules & Regulations of the company, you may be asked to promote any product(s) of group or may be transferred to any division(s) of the group. Your unwillingness to accept the opportunity shall be treated disregard to company policy and management is free to take any disciplinary action for this.
12. **MEDICAL EXAMINATION:** You might be asked to undergo medical examination during the course of your employment as and when directed by the management.
13. **MISCONDUCT:** The following acts and omissions will be considered misconduct on the part of field member :
- Non fulfillment of rules and regulation of the company.
 - Double employment.
 - Refusing or avoiding transfers.
 - False reporting.
 - Misuse of physician's samples and promotional material.
 - Leaking confidential information.
 - Giving false information in application form and course of employment.
 - Disobeying the instructions or assignments given by seniors.
 - Non-participation in quarterly meeting, indoor refresher course and field refresher courses.
 - Fake billings and claiming expenses which were not borne by you in actual.
 - Bad administration work.
 - Demanding or accepting gifts/money in any form (loan or gift) from doctors / chemists / stockiest / C&F agents with whom the company has business contacts.
 - Indulging in coercive / wrong activities with any doctor / stockiest / dealer or any other employee of our company or any other company with in the establishment of the company or outside it.
 - Refusal for accepting charge sheet, order of suspension, notice & letters.
 - Any other activity which are against moral values.

If found guilty for any of the above mentioned misconduct, your services are liable to be terminated by way of dismissal without any notice or any compensation whatsoever.

14. WORKING DAYS:

- Working days are from Monday to Saturday.
- You will interview / interact a minimum average 15 doctors everyday keeping in mind the convenience of the doctors. These calls must be made as effective as possible.
- You will post daily reports, expenses statements, sample acknowledge form, market reports, stock & sales statement of your stockist, list of doctors not contacted and any other reports required by your managers / office at the intervals directed by them.
- Visit record should be maintained up to date at all time.
- All letters from the office must be acknowledged and attended to within 3 days from receipt of the letters.
- If the daily reports or other reports are not received by the company within 7 days from their scheduled dates, it shall be considered that you have remained unauthorised absent from work, not entitling you for any payments / remuneration, for the period for which the said reports are not submitted.

CONT..... 5

FOR MANKIND PHARMA LTD.

Self Attested: _____

[Signature]
Authorised Signatory



(A Marketing Division)

Regd. Office: MANKIND PHARMA LIMITED, 208, Okhla Ind. Estate, Phase-3, New Delhi-110020

11-4-2000 Fax: 011-46541382, E-mail: contact@mankindpharma.com, www.mankindpharma.com

CIN No. :U74899DL1991PLC044843



Mankind

-5-

Serving Life

15. **PAID HOLIDAYS:** You will be eligible for ten paid holidays in a calendar year.
16. **ENQUIRY & PENALTY:** If anyone is found indulging in any type of misconduct stated above the Management have the right to initiate inquiry for the said misconduct, or you may be awarded with the following penalties depending on the nature & severity of the misconduct:
- Suspension
 - Dismissal
 - Compulsory Retirement
 - Termination
 - Withhold of increments or promotions.
 - Imposition of fine.
- The above penalties shall be final, conclusive and binding upon you in all respects and shall not be questioned by you on any grounds whatsoever.
17. **LOSS OF LIEN:** If it is reported that you have remained absent without leave and without prior permission in writing from the Management for a continuous period of five days, you will be liable to lose your lien on your appointment, unless you explain to the satisfaction of the management about the grounds of your inability to resume your duty with sufficient proof. It is expressly agreed that the Management will be the sole judge about the explanation that may be tendered by you in this respect as to whether the same is to be accepted or not. If you remain absent at any time beyond the period of leave originally granted, or subsequently extended, you are liable to lose your lien on your appointment, unless you return within five days of the expiry of the sanctioned leave explain to the satisfaction of the Management your inability to resume your duty immediately on the expiry of your leave, but in such cases also the Management will be the sole judge to decide the validity of your explanation.
18. **RESIGNATION:** If you desire to leave the services you shall give one month's notice in writing to the company. If you leave the services without giving one month's notice, the company shall be entitled to deduct one month gross salary from your dues. In case of resignation tendered by you, you will not be relieved of your duties unless the resignation has been accepted in writing by the company and unless you handover complete charge of your job as well as materials, articles and things belonging to the company that may have come in your possession during your employment, to the Management or the superior concerned.
19. You are covered under category "Sales Man" as per Sales Promotion Employees Act. "Sales man" means any person by whatever name called employed or engaged in any establishment for hire or reward to do any work relating to promotion of sales or business as per the sales promotion employees Act, 1976, 2(d).
20. **JURISDICTION:** You will be governed by Head Office at Delhi. Your salary will be deemed to have been paid at Delhi and for all purpose, your appointment also will be deemed to have made at Delhi. In case of any dispute that may arise between you and the company in connection with any of the matters specified in this agreement, it is specifically agreed and understood by and between the parties that the courts situated in the city of Delhi alone will have jurisdiction to try and entertain such matters.

You are requested to implement the measures introduced by the management from time to time. Such changes can be in plans, procedures, systems required for the benefit of the company.

We hope this is beginning of your long and prosperous career with us.

Yours Sincerely

FOR MANKIND PHARMA LTD.



Discovery
Mankind

(A Marketing Division)

[Signature]
Authorised Signatory

HEAD OFFICE: MANKIND PHARMA LIMITED, 208, Okhla Ind. Estate, Phase-3, New Delhi-110020

REG. OFFICE: MANKIND PHARMA LIMITED, 208, Okhla Ind. Estate, Phase-3, New Delhi-110020
Fax: 011-46541382, E-mail: contact@mankindpharma.com, www.mankindpharma.com

CIN No. U74899DL1991PLC044843

Mr.Ashwin Dilip Pakhan
Senior Field Manager
Sales

Annexure 1

Following would be your CTC:

S.NO	SALARY HEADS	MONTHLY (RS.)	ANNUALLY (RS.)
A	FIXED COMPONENT		
1	Basic	9000	108000
2	House Rent Allowance	4000	48000
3	IMGJ	4500	54000
GROSS TOTAL		17500	210000
B	RETIRAL BENEFIT		
4	Gratuity	433	5196
5	PF	1776	21312
6	ESI	611	7332
C	OTHER BENEFIT		
7	Bonus	1157	13884
8	Special Bonus	1300	15600
9	Leave Travel Allowance	275	3300
10	Insurance Premium	25	300
GRAND TOTAL		23077	276924
IN WORDS	Rs Two Lakh Seventy Six Thousand Nine Hundred Twenty Four Only		

*You are also eligible for standard daily working allowances as per company policy applicable from time to time in the region of your posting.

Group Mediclaim Policy: Covers Self, Spouse, upto 2 children and 2 dependents subject to the limit defined in company policy.


Group Accident Insurance Policy: Coverage as per Company policy.

Please confirm your acceptance of the salary structure as attached in Annexure-1 by signing and returning this letter in duplicate for our records.

Acceptance:

FOR MANKIND PHARMA LTD.

Date:


Authorised Signatory



(A Marketing Division)

MANKIND PHARMA LIMITED, 208, Okhla Ind. Estate, Phase-3, New Delhi-110020

Tel: 011-46541382 Fax: 011-46541382, E-mail: contact@mankindpharma.com, www.mankindpharma.com

CIN No. :U74899DL1991PLC044843



Effect Of Kanchnar Guggul,Flaxseeds And Spearmintto Reduce Testosterone Level In Pcos And Pcod

Sahilsingh Ravindra singh Pardeshi, Shruti Dattatraya Chaudhari and Gauri Vijay Sonar.

Submitted: 15-07-2023

Accepted: 25-07-2023

ABSTRACT:

Polycystic ovary syndrome (PCOS) is of clinical and public health importance as it is very common, affecting up to one in five women of reproductive age. It has significant and diverse clinical implications including reproductive (infertility, hyperandrogenism, hirsutism), metabolic (insulin resistance, impaired glucose tolerance, type 2 diabetes mellitus, adverse cardiovascular risk profiles) and psychological features (increased anxiety, depression and worsened quality of life). Testosterone is a male sex hormone, or androgen, produced in a woman's ovaries in small amounts. Combined with estrogen, the female sex hormone, testosterone helps with the growth, maintenance, and repair of a woman's reproductive tissues, bone mass, and human behaviors. Kanchanar Guggulu is an effective Ayurvedic classical preparation that helps to promote a fully mature ovum and reduce the chance of PCOS. According to Ayurveda, the aggravation of Kapha and Manda Agni is considered responsible for PCOS. Flaxseed is a rich source of lignan and has been shown to reduce androgen levels in men with prostate cancer. Spearmint decreases body weight in the PCOS condition and since it has antiandrogenic potential, its administration leads to decrease of androgen production. Studies shows that spearmint leaves decreases cholesterol and in type II diabetes, decreases oxidative stress. Polycystic ovarian syndrome (PCOS), a common endocrine disorder among women in their reproductive years, also is associated with high levels of androgens and is frequently accompanied by hirsutism, amenorrhea and obesity. Hirsutism in polycystic ovarian syndrome (PCOS), consequent to elevated androgen levels leads to significant cosmetic and psychological problems. Recent research in Turkey has shown that spearmint tea has antiandrogenic properties in females with hirsutism.

KEYWORDS: PCOD, PCOS, Testosterone, Kanchnar guggul, Flaxseeds, Spearmint

I. INTRODUCTION:

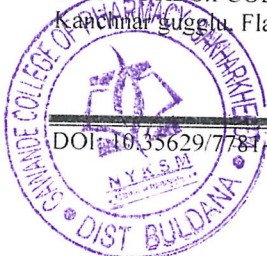
Polycystic ovary syndrome (PCOS) is a condition in which the ovaries produce an abnormal amount of androgens, male sex hormones that are usually present in women in small amounts. The name polycystic ovary syndrome describes the numerous small cysts (fluid-filled sacs) that form in the ovaries. However, some women with this disorder do not have cysts, while some women without the disorder do develop cysts.

Ovulation occurs when a mature egg is released from an ovary. This happens so it can be fertilized by a male sperm. If the egg is not fertilized, it is sent out of the body during your period.

In some cases, a woman doesn't make enough of the hormones needed to ovulate. When ovulation doesn't happen, the ovaries can develop many small cysts. These cysts make hormones called androgens. Women with PCOS often have high levels of androgens. This can cause more problems with a woman's menstrual cycle. And it can cause many of the symptoms of PCOS.

Treatment for PCOS is often done with medication. This can't cure PCOS, but it helps reduce symptoms and prevent some health problems.

- Abnormal menstruation – missing periods, not having periods, heavy bleeding during periods.
- Excessive hair growth – excess hair growth on the face, arms, chest, and abdomen
- Acne – hard-to-treat pimples on the back, chest, and face.
- Obesity – 38%–88% of women with PCOS are either overweight or obese²
- Dark skin – patches of darker skin may occur in the armpits, groin, and under the breasts
- Skin flaps – small flaps of extra skin (usually in the armpits or neck area)
- Hair problems – hair on the head may begin to thin and fall out.



Difference between PCOD and PCOS

The significant difference between PCOD and PCOS are:

Polycystic Ovary Disease (PCOD)	Polycystic ovary syndrome (PCOS)
<ul style="list-style-type: none"> • PCOD is common. Close to 33% of women worldwide experience the symptoms of PCOD. • Those with PCOD can ovulate consistently. The ones who have PCOD might have comparable symptoms to PCOS, yet can ovulate occasionally and, subsequently, can conceive. • PCOS is a serious metabolic medical disorder. Women who experience the symptoms of PCOS are at risk of diabetes, hypertension, vascular heart issues, weight and, surprisingly, endometrial cancer. 	<ul style="list-style-type: none"> • PCOS is an uncommon condition and affects 4%–20% of women of reproductive age worldwide. • Those with PCOS have huge infertility issues. Females who experience the symptoms of PCOS, battle with infertility. They have higher chances of miscarriages. • PCOD isn't a disorder moreover a symptom of PCOS; also, it gets reversed with the proper eating routine and exercise plan.

Women with high testosterone:

Testosterone is a male sex hormone, or androgen, produced in a woman's ovaries in small amounts. Combined with estrogen, the female sex hormone, testosterone helps with the growth, maintenance, and repair of a woman's reproductive tissues, bone mass, and human behaviors.

Symptoms of too much testosterone in women:

Too much testosterone can cause symptoms that effect a woman's physical appearance including:

- excess body hair, specifically facial hair

- balding
- acne
- enlarged clitoris
- decreased breast size
- deepening of the voice
- increased muscle mass
- irregular menstrual cycles
- low libido
- changes in mood in more severe cases of testosterone imbalances in women, high testosterone can cause infertility and obesity.

Pathogenesis of PCOS:

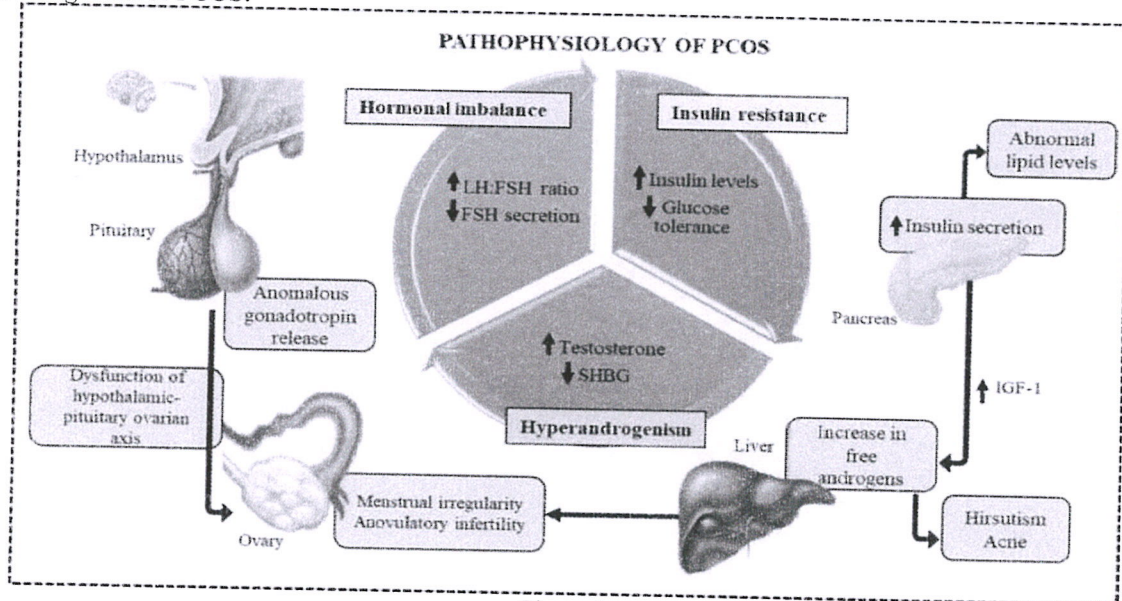


Fig.no.1

Causes of high testosterone in women:

Various diseases or hormonal disorders can cause hormonal changes in women. The most common causes of high testosterone levels in women are hirsutism, polycystic ovary syndrome, and congenital adrenal hyperplasia.

1. Hirsutism:

Hirsutism is a hormonal condition in women that causes growth of unwanted hair, specifically on the back, face, and chest. The amount of body hair growth is highly dependent on genetics, but this condition is primarily caused by an imbalance of androgen hormones.

2. Polycystic ovary syndrome:

Polycystic ovary syndrome (PCOS) is another hormonal disorder caused by an excess of androgen hormones in women. If you have PCOS, you may have irregular or prolonged periods, unwanted body hair growth, and enlarged ovaries that may not function properly.

Other common complications of PCOS are:

- infertility
- miscarriage
- type 2 diabetes
- obesity
- endometrial cancer

3. Congenital adrenal hyperplasia:

Congenital adrenal hyperplasia (CAH) is a disorder that directly affects the adrenal glands and the production of the body's hormones. In many cases of CAH, the body overproduces androgen.

Common symptoms of this disorder in women include:

- infertility
- masculine characteristics
- early appearance of pubic hair
- severe acne Treatment for high testosterone depends on the cause, but generally includes medication or lifestyle changes.
- Medications used to treat high testosterone include:
 - glucocorticosteroids
 - metformin
 - oral contraceptives
 - spironolactone Oral contraceptives have been shown as effective treatment for blocking testosterone, but this treatment method will interfere if you have immediate plans to get pregnant.

According to research from the American Academy of Family Physicians, low-dose birth control that use low levels of norgestimate, gestodene, and desogestrel are the best choices.

All of these medications are only available by prescription. To obtain one, you must meet with your doctor or gynecologist. Making certain lifestyle changes can also affect testosterone levels. Starting an exercise or weight loss program can help because losing weight can improve symptoms. Some women choose only to treat their symptoms, including shaving or bleaching hair and using facial cleaners for acne or oily skin.

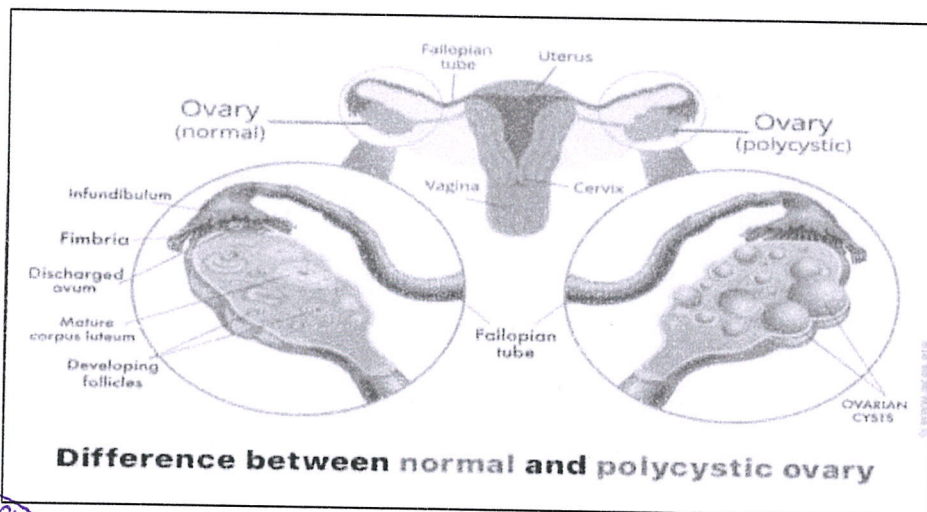


Fig.no.2



MATERIAL:

KANCHNAR GUGGULU:

Kanchanar Guggulu is an effective Ayurvedic classical preparation that helps to promote a fully mature ovum and reduce the chance of PCOS. According to Ayurveda, the aggravation of Kapha and Manda Agni is considered responsible for PCOS. Its effective ayurvedic remedy for treating hypothyroidism, hormonal imbalance, PCOS and joint pains. The word Guggulu originated from the Sanskrit word Guggulu means 'protection from the disease'. It also promotes the functioning of the lymphatic system and in getting rid of toxins.

Kanchanar Guggulu is a traditional classic polyherbal formulation used for the treatment of tumors, cystic swelling, PCOS, and ulcers. It reduces swellings and lumps by drying the excess Kapha and fluid in the body. It contains ingredients which show anti-inflammatory, anti-tumor, diuretic, and decongestant properties that help to promote healthy function of the body.

Kanchanar Guggulu is widely used by Ayurvedic experts for normalizing the function of the thyroid gland. Detoxifying and cleansing properties of Guggulu are combined with Kanchanar to support the healthy function of the thyroid. It also helps to cleanse the lymphatic system (network of tissues and organs which help to remove toxins, waste, and other unwanted materials from the body).

Kanchanar Guggulu, when taken in the prescribed dose and duration, is considered safe for use. However, if you are suffering from any chronic disease, it would be best to avoid self-medication and consult a doctor before using Kanchanar Guggulu.

Ingredients of Kanchanar guggulu:

Kanchanar guggulu has a distinct odour and a bitter taste. It consists of about 12 ingredients. These include:4

- Kanchanar
- Haritaki
- Bibhitaka
- Amalaki
- Marica
- Shunthi
- Pippali
- Ela or Suksmaila
- Varuna
- Tvak
- Tejpatra
- Chudamani Shuddha

Shatavari (Asparagus)

Shatavari, popularly known as Sparrowgrass, does not need any introduction as it is known as an item of diet. It is a diuretic, brings clear motion and is nutritious. A variety of it in India, known as Shatavari, is considered one of the healthiest herbs.

Shatavari increases vitality and virility. It has a cooling, soothing and calming effect. It agrees more with the fire and air type of temperaments. Shatavari helps to balance hormones and helps to regulate the menstrual cycle. In addition, it helps in preventing new cysts formation in ovaries

Varuna

Varuna works excellent in reducing the size of cysts in ovaries and helps clear the reproductive tract and regulates the menstrual cycle.

Pippali

Pippali works wonders on weight management and is considered an incredible rejuvenator. Pippali has antioxidant and carminative properties, which help to prevent oxidation of cells in the reproductive system.

FLAXSEEDS:

Flaxseed is a rich source of lignan and has been shown to reduce androgen levels in men with prostate cancer. Polycystic ovarian syndrome (PCOS), a common endocrine disorder among women in their reproductive years, also is associated with high levels of androgens and is frequently accompanied by hirsutism, amenorrhea and obesity. This clinical case study describes the impact of flaxseed supplementation (30 g/day) on hormonal levels in a 31-year-old woman with PCOS.

Flaxseed, a food generally renowned for its omega-3 fatty acid content, also is one of the richest sources of dietary lignan, having levels that are 800-fold over that of most other foods. (Thompson, 1995). Prior studies on the use of flaxseed or isolated lignan suggest that it may decrease androgen levels and normalize lipid levels; however, most of this research has been conducted in male subjects. (Adlercreutz et al, 1987, Demark-Wahnefried et al, 2001, Shultz & Leklam, 1983, Slavin et al, 1997). Currently, there are no published reports on the use of flaxseed in the treatment of PCOS, even though it also is an androgen-related disorder. The following





case study provides preliminary evidence that flaxseed supplementation may indeed help regulate androgen levels in women with PCOS. Hirsutism in polycystic ovarian syndrome (PCOS), consequent to elevated androgen levels leads to significant cosmetic and psychological problems. Recent research in Turkey has shown that spearmint has antiandrogenic properties in females with hirsutism.

SPEARMINT:

Spearmint for PCOS

In an animal model study conducted to evaluate the positive effect of spearmint tea on PCOS, it was observed that spearmint has an antiandrogenic effect, helping reduce testosterone levels.

In this study, the endocrine profile in animals with PCOS improved after they consumed spearmint hydroalcoholic extract.

Another study showed that spearmint positively affects women with excessive hair growth on the face, chest, and back. Patients experienced a reduction in FSH (follicle-stimulating hormone), LH (luteinizing hormone), and DHEA (dehydroepiandrosterone hormone) levels.

While these studies show the potential of spearmint to help with PCOS, there are too few of them to make definitive conclusions.

Meanwhile, drinking spearmint could have such side effects as:

Allergic reactions (rare)

Damage to the uterus during pregnancy

Worsening of existing kidney problems

Possible increase in liver damage

It is necessary to talk to your doctor about how spearmint tea interacts with other medications. For example, taking spearmint together with sedatives could cause breathing problems.

Other benefits of spearmint

Spearmint (*Mentha spicata*) is a mint type that contains vitamins A, B2, B3, and folate, as well as minerals such as potassium, calcium, and magnesium.

This herb has several potential benefits, including:

- Antiparasitic activity
- Antioxidant activity
- Stimulating properties
- Antispasmodic properties

More studies are needed to evaluate spearmint's benefits, contraindications, and side effects. Before using spearmint-based medications that are yet to receive US FDA approval, PCOS patients should seek medical guidance.

II. METHODS:

Experimental design

This study was attained under the approval of the state committee on animal ethics, Shiraz University, Shiraz, Iran. Also, the testimonial of the European Council Directive (86/ 609/ EC) of November 24, 1980, regarding the standards in the protection of animals for experimental goals were followed. Twenty-four adult female Sprague Dawley rats (200 ± 20 g) purchased from Comparative and Experimental Center of Medical Sciences Department of Shiraz Medical University. Animals with regular reproductive cycle (following 3 cycles checking), were selected and randomly dispensed into four groups as control (C) (received distilled water), Treatment- Control (TC) (received 40 mg/kg hydroalcoholic extract of spearmint + 200 mg/kg flaxseed extract for 30 days by gavage). PCOS was induced in the next two groups, PCOS group, and Treatment group (T) by a single intramuscular injection of estradiol valerate (4 mg/rat). The treatment group received 40 mg/kg spearmint extract + 200 mg/kg flaxseed extract for 30 days by gavage, 7 weeks after injection of estradiol valerate, while PCOS group received distilled water during the same period. Animals were kept in the standard polypropylene cages at 20–22 °C, 38% humidity and 12/12 h light/dark cycle, fed with a standard pellet diet and had free access to tap water.

Preparation of hydroalcoholic extract of kanchnar gugglu, spearmint and flaxseed

Kanchnar gugglu Fresh spearmint and flaxseed were purchased from a local market source in Shiraz. The plants' qualities were confirmed by a botanist in the biology department. After clearing and drying, the spearmint was completely ground; the resulting powder was placed in 70% alcohol for 72 h. After straightening with filter paper, the rotary machine was used to concentrate extract under reduced pressure. The resultant semi-solid extract put into a lyophilizer machine for 24 h in order to make a powder. The same procedure was used for flaxseed after grinding of the seeds.



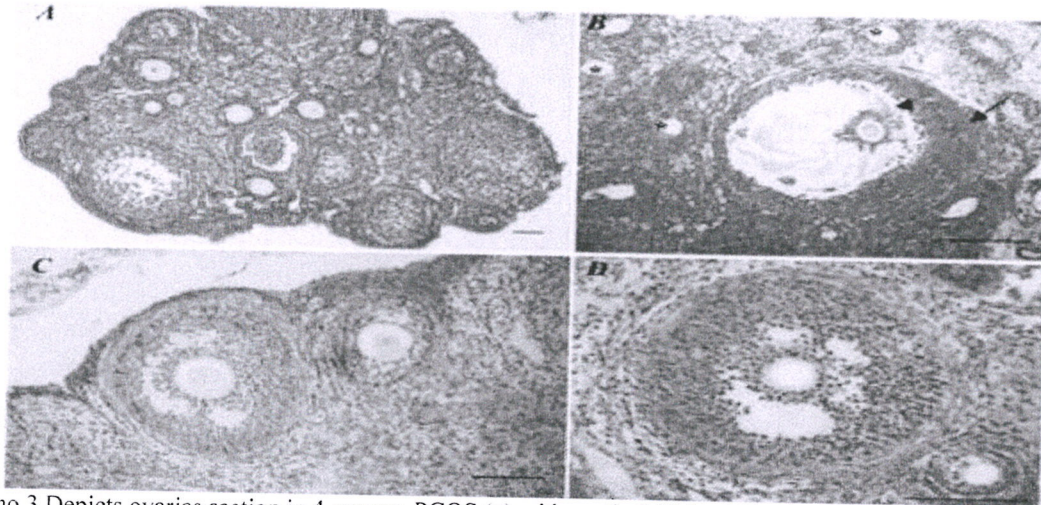


Fig.no.3 Depicts ovaries section in 4 groups, PCOS (a) with cystic follicles 100 micrometer, treatment (b) with pre-antral and antral follicles, Control (c) Including antral follicles and Treatment Control (d) Which includes primary follicles as antral follicles (H & E Staining) index bars, 50.0 micrometer.

Diet chart for PCOD patients:

	Breakfast	Mid-meal	Lunch	Evening	Dinner
Sunday	2 Idlis with Sambar 1/2 cup and Green chutney or Tomato Chutney	1 cup green gram sprouts	2 Rotis, 1/2 cup salad with Fish curry (100 gm fish) and 1/2 cup cabbage subji.	A portion of fruit but avoid high sugar fruits like banana, Jack fruit, Mango, Chikku.)	2 Roti / chapati. + Tomato subji 1/2 cup.
Monday	2 Slices brown bread. +1 slice low-fat cheese+2 Boiled egg whites.	A portion of fruit but avoid high sugar fruits like banana, Jack fruit, Mango, Chikku.)	Veg pulao rice 1 cup+ 1/2 cup Soya Chunk curry+ 1/2 cup Butter Milk.	1 cup light tea+ 2 wheat rusks	2 roti/ Chapati+ Ladies finger subji 1/2 cup.
Tuesday	Chapati 2 + 1/2 cup green pea's curry.	1/2 cup boiled black chana	1 cup rice+ 1/2 cup Dhal+ Palak subji 1/2 cup+ 1/2 cup low-fat curd.	A portion of fruit but avoid high sugar fruits like banana, Jack fruit, Mango, Chikku.)	Broken wheat upma 1 cup+ 1/2 cup green beans subji
Wednesday	Methi Parata 2+ 1 tbsp green chutney.	A portion of fruit but avoids high sugar fruits like banana, Jack fruit, Mango, Chikku.)	1 cup rice+ chicken curry (150 gm chicken)+ 1 cup cucumber salad.	1 cup light tea+ Brown rice flakes poha 1/2 cup.	Wheat Dosa 2 + 1/2 cup Bitter guard subji.



Thursday	Vegetable Oats Upma 1 cup+ 1/2 cup low-fat milk.	Plain Yoghurt and raw vegetables or 1 cup grilled vegetables	1/2 cup rice + 2 medium chappatis+1/2 cup Kidney beans curry+ Snake gourd subji 1/2 cup.	1 cup boiled chana+1 cup light tea.	2 Roti/ chapati+ 1/2 cup mixed veg curry
Friday	Mixed veg Poha 1 cup+ 1/2 cup low-fat milk.	A portion of fruit but avoids high sugar fruits like banana, Jack fruit, Mango, Chikku.)	2 Chapati+ 1/2 cup cluster beans subji+ Fish curry (100g fish) 1/2 cup.	1 cup tea+ + 2 biscuits (Digestive or Oatmeal.)	2 Rotis / chapathi + Ridge gourd subji 1/2 cup.
Saturday	Uthappam 2+ 1 tbsp green chutney.	1 cup boiled chana	1 cup rice+ Soya chunk curry 1/2 cup+ Ladies finger subji 1/2 cup+ 1 small cup low-fat curd.	A portion of fruit but avoids high sugar fruits like banana, Jack fruit, Mango, Chikku.)	Broken wheat upma 1 cup+ 1/2 cup green beans subji

III. RESULT:

The patient had followed the diet and restriction as advised. Pelvic pain irregular menstrual cycle and associated symptoms have disappeared. The USG was done after the completion of 3 months. The findings of USG of whole abdomen including pelvic region report before and after treatment are:

USG (Before treatment):

Uterus:

Uterus is anteverted measures 7.9×4.6×3.2 cm. Normal myometrial echo pattern seen. No focal lesion seen. Endometrium measures 9.4mm. No collection or lesion seen

Ovaries:

Right ovary measures 3.6×2.6×1.9cm shows multiple small follicles of upto (8mm) arranged peripherally with stromal hyperchogenicity- PCOD pattern.

Left ovary measures 3.3×2.6×1.9cm shows multiple small follicles of upto (8mm) arranged peripherally with stromal hyperchogenicity-PCOD pattern. No adnexal mass seen.

USG (After treatment):

Uterus:

Normal in size, shape and anteverted position. Endometrial cavity appears empty.

Ovaries:

Both ovaries appeared normal in size, shape and position.

Lifestyle change aiding in PCOD and PCOS:

People with PCOD can also benefit from a change in their lifestyle. According to studies, combining a PCOD diet with physical exercise can result in the following advantages:

- Slimming down
- Increased insulin sensitivity
- More consistent periods
- Male hormone levels are lower
- Low cholesterol level

Women can use behavioral measures to assist them to reach their weight-loss goals, which will help them manage their PCOS symptoms.

These are some of the practices:

- Social support networks for goal-setting
- Strategies for self-monitoring
- Taking care of one's mental health

Self-care habits like getting enough sleep, avoiding over-commitment, and setting aside time to unwind can also help with PCOD management.





IV. CONCLUSION:

In summary administration of a combination of kanchanar gugglu, spearmint and flaxseed extract to PCOS patient improved endocrine secretion including estradiol, progesterone and testosterone level and ovarian histology which are more remarkable than using Kanchanarguggule flaxseed or spearmint alone, reported previously. The results highlighted the potential effects of using a combination of kanchanar gugglu spearmint and flaxseed extract for treatment of PCOS.

REFERENCE:

- [1]. Nowak DA, Snyder DC, Brown AJ, Demark-Wahnefried W. The effect of flaxseed supplementation on hormonal levels associated with polycystic ovarian syndrome: a case study. *Curr Top Nutraceutical Res.* 2007;5(4):177.
- [2]. Dutta DC; Text book of Gynecology including contraception; edited by KonarHiralal; New central book agency (P) Ltd. Kolkata; 6th ed; 2013; p – 440.
- [3]. Wu Q., Gao J., Bai D., Yang Z., Liao Q. The prevalence of polycystic ovarian syndrome in Chinese women: A meta-analysis. *Ann. Palliat. Med.* 2021;10:74-87. doi:10.21037/apm-20-1893. [PubMed] [CrossRef] [Google Scholar]
- [4]. Mazzio EA, Soliman KF. In vitro screening for the tumoricidal properties of international medicinal herbs. *Phytother Res.* 2009;23(3):385–98.
- [5]. ShashtriPanditKashinatha and ChaturvediGorakhanatha. Charakasamhita of Agnivesh, edited with vidyotini. 1st volume. Varanasi India: ChaukhumbaBharti Academy Part II; 2016. Chikitsashasthana 30/45.
- [6]. Hallajzadeh J, Khoramdad M, Karamzad N, Almasi-Hashiani A, Janati A, Ayubi E, Pakzad R, Sullman MJM, Safari S, Metabolic syndrome and its components among women with polycystic ovary syndrome: a systematic review and meta-analysis. *Journal of cardiovascular and thoracic research.* 2018 [PubMed PMID: 30116503]
- [7]. Atis A, Aydin Y, Ciftci F, Saktiz D, Arslan A, Toklu AS, Donmez M, Goker N. Hyperbaric oxygen increases atresia in normal & steroid induced PCO rat ovaries. *ReprodBiolEndocrinol.* 2012;10(1):11.
- [8]. ShastreeAmbikadattaKaviraj. SushrutaSamhita. Reprint edition 2014. Varanasi India: Chaukhamba Sanskrit Sansthan; 2014. Reprint Kashi Sanskrit granthmala 156.
- [9]. Marciniak A, Lejman-Larysz K, Nawrocka-Rutkowska J, Brodowska A, Songin D. [Polycystic ovary syndrome-current state of knowledge]. *PolskiMerkuriuszLekarski: organ PolskiegoTowarzystwaLekarskiego.* 2018 Jun 27 [PubMed PMID:30057399]
- [10]. Dunne N. The natural diet solution for PCOS and infertility: how to manage polycystic ovary syndrome naturally: natural solutions for PCOS; 2006.
- [11]. Howkins& Bourne. Shaw's Textbook of Gynecology 16th edition, VG Padubidri, SN Daftary chapter no. 32 named disorders of the ovary.
- [12]. Xie J, Burstein F, Garad R, Teede HJ, Boyle JA, Personalized Mobile Tool AskPCOS Delivering Evidence-Based Quality Information about Polycystic Ovary Syndrome, Seminars in reproductive medicine. 2018 Jan [PubMed PMID: 30189453]
- [13]. Sastre ME, Prat MO, Checa MA, Carreras RC. Current trends in the treatment of polycystic ovary syndrome with desire for children. *TherClin Risk Manag.* 2009;5:353.
- [14]. Sharma Hemraj. KashyapaSamhita. Reprint edition 2018. Varanasi India: Chaukhamba Sanskrit Sansthan; 2018. sthana. RevatiKalpaShloka -33, Page-192.
- [15]. Tay CT, Moran LJ, Wijeyaratne CN, Redman LM, Norman RJ, Teede HJ, Joham AE, Integrated Model of Care for Polycystic Ovary Syndrome. Seminars in reproductive medicine. 2018 Jan [PubMed PMID: 30189456]
- [16]. Jelodar G, Masoomi S, Rahmanifar F. Hydroalcoholic extract of flaxseed improves polycystic ovary syndrome in a rat model. *Iran J Basic Med Sci.* 2018;21(6):645–50.
- [17]. Franz Geisthovel and Thomas Rabe.ReproductionBioMedicineOnline.Vo lume 14, issue:2007.Pages 522-535.
- [18]. Maya ET, Guure CB, Adanu RMK, Sarfo B, Ntuny M, Bonney EY, Lizneva D, Walker W, Azziz R, why we need epidemiologic studies of polycystic ovary





- syndrome in Africa. International journal of gynaecology and obstetrics: the official organ of the International Federation of Gynaecology and Obstetrics. 2018 Nov [PubMed PMID: 30092610]
- [19]. Adlercreutz H, Bannwart C, Wahala K, Makela T, Brunow G, Hase T, Arosemena PJ, Kellis JT Jr, Vickery LE. Inhibition of human aromatase by mammalian lignans and isoflavonoid phytoestrogens. *J Steroid BiochemMol Biol.* 1993;44(2):147-53.
- [20]. KastureShridharaHaridasVaidya. *AyurvediyaPanchkarmavigyana.* 17th Edition. Allahabad: ShriBaidyanathAyurvedBhavan Limited; 2014.
- [21]. Glinborg D, Altinok MZ, Mumm H, Hermann AP, Ravn P, Andersen M. Body composition is improved during 12 months' treatment with metformin alone or combined with oral contraceptives compared with treatment with oral contraceptives in polycystic ovary syndrome. *The Journal of clinical endocrinology and metabolism.* 2014 Jul; [PubMed PMID: 24742124]
- [22]. Adlercreutz H, Hockerstedt K, Bannwart C, Bloigu S, Hamalainen E, Fotsis T, Ollus A. Effect of dietary components, including lignans and phytoestrogens, on enterohepatic circulation and liver metabolism of estrogens and on sex hormone binding globulin (SHBG). *J Steroid Biochem.* 1987;27(4-6):1135-44.
- [23]. TripathiBhramanand.AshtangHridayam.edited with Nirmalahindi commentary.1st volume.DelhiIndia:Chaukhamba Sanskrit Pratishthan 2014.Sutra Sthan 1/25 page no.-20.
- [24]. Liu J., Wu Q., Hao Y., Jiao M., Wang X., Jiang S., Han L. Measuring the global disease burden of polycystic ovary syndrome in 194 countries: Global Burden of Disease Study 2017. *Hum. Reprod.* 2021;36:1108-1119. doi: 10.1093/humrep/deaa371. [PMC free article] [PubMed] [CrossRef] [Google Scholar]
- [25]. Huang K-Y. Archiving biomedical mouse models by ovary cryopreservation: Utrecht University; 2009.
- [26]. ShashtriPanditKashinatha and ChaturvediGorakhanatha. *Charakasamhita of Agnivesh.* edited with vidyotini. 1st volume. Varanasi India: ChaukhumbaBharti Academy Part I; 2016. sutrasthanachikitsahaprabhratya 16/20.
- [27]. Legro R.S., Kunesman A.R., Dodson W.C., Dunaif A. Prevalence and predictors of risk for type 2 diabetes mellitus and impaired glucose tolerance in polycystic ovary syndrome: A prospective, controlled study in 254 affected women. *J. Clin. Endocrinol. Metab.* 1999;84:165-169. doi: 10.1097/00006254-199906000-00019. [PubMed] [CrossRef] [Google Scholar]
- [28]. Salvetti NR, Canal AM, Gimeno EJ, Ortega HH. Polycystic ovarian syndrome: temporal characterization of the induction and reversion process in an experimental model. *Braz J Vet Res Anim Sci.* 2004;41(6):389-95.
- [29]. Sastri L. *Yogaratanakaravidyotini*, 7Th ed. VaransiChaukhumbaSanskritSansthan, 2002. Chapter 1.
- [30]. Sagvekar P., Shinde G., Mangoli V., Desai S.K., Mukherjee S. Evidence for TET-mediated DNA demethylation as an epigenetic alteration in cumulus granulosa cells of women with polycystic ovary syndrome. *Mol. Hum. Reprod.* 2022;28:gaac019. doi: 10.1093/molehr/gaac019. [PubMed] [CrossRef] [Google Scholar]
- [31]. Kakoly N.S., Khomami M.B., Joham A.E., Cooray S.D., Misso M.L., Norman R.J., Harrison C.L., Ranasinha S., Teede H.J., Moran L.J. Ethnicity, obesity and the prevalence of impaired glucose tolerance and type 2 diabetes in PCOS: A systematic review and meta-regression. *Hum. Reprod. Update.* 2018;24:455-467. doi: 10.1093/humupd/dmy007. [PubMed] [CrossRef] [Google Scholar]



Polytechnic Overeat Sintrems and Disease

Sahilsingh Ravindrasingh Pardeshi¹, Bhushan Shashikant Bhale²

Gawande College of Pharmacy Sakharherda, Sant Gadge Baba Amravati University

Abstract: Polycystic ovary syndrome (PCOS) is of clinical and public health importance as it is very common, affecting up to one in five women of reproductive age. It has significant and diverse clinical implications including reproductive (infertility, hyperandrogenism, hirsutism), metabolic (insulin resistance, impaired glucose tolerance, type 2 diabetes mellitus, adverse cardiovascular risk profiles) and psychological features (increased anxiety, depression and worsened quality of life). Polycystic ovary syndrome is a heterogeneous condition and, as such, clinical and research agendas are broad and involve many disciplines. The phenotype varies widely depending on life stage, genotype, ethnicity and environmental factors including lifestyle and bodyweight. Importantly, PCOS has unique interactions with the ever-increasing obesity prevalence worldwide as obesity-induced insulin resistance significantly exacerbates all the features of PCOS. Furthermore, it has clinical implications across the lifespan and is relevant to related family members with an increased risk for metabolic conditions reported in first-degree relatives. Therapy should focus on both the short and long-term reproductive, metabolic and psychological features. Given the aetiological role of insulin resistance and the impact of obesity on both hyperinsulinaemia and hyperandrogenism, multidisciplinary lifestyle improvement aimed at normalizing insulin resistance, improving androgen status and aiding weight management is recognised as a crucial initial treatment strategy. Modest weight loss of 5% to 10% of initial body weight has been demonstrated to improve many of the features of PCOS. Management should focus on support, education, addressing psychological factors and strongly emphasising healthy lifestyle with targeted medical therapy as required. Monitoring and management of long-term metabolic complications is also an important part of routine clinical care. Comprehensive evidence-based guidelines are needed to aid early diagnosis, appropriate investigation, regular screening and treatment of this common condition. Whilst reproductive features of PCOS are well recognised and are covered here, this review focuses primarily on the less appreciated cardiometabolic and psychological features of PCOS.

Keywords: Polycystic ovary syndrome (PCOS), obesity-induced insulin resistance, hormonal disorder in women, Excess androgen, hormonal imbalance, androgen, Pelvic exam, Progestin therapy, Reproductive implications

1. Introduction

Polycystic ovary syndrome (PCOS) is a condition in which the ovaries produce an abnormal amount of androgens, male sex hormones that are usually present in women in small amounts. The name polycystic ovary syndrome describes the numerous small cysts (fluid-filled sacs) that form in the ovaries. However, some women with this disorder do not have cysts, while some women without the disorder do develop cysts.

Ovulation occurs when a mature egg is released from an ovary. This happens so it can be fertilized by a male sperm. If the egg is not fertilized, it is sent out of the body during your period.

In some cases, a woman doesn't make enough of the hormones needed to ovulate. When ovulation doesn't happen, the ovaries can develop many small cysts. These cysts make hormones called androgens. Women with PCOS often have high levels of androgens. This can cause more problems with a woman's menstrual cycle. And it can cause many of the symptoms of PCOS. Treatment for PCOS is often done with medication. This can't cure PCOS, but it helps reduce symptoms and prevent some health problems.

It is a prevalent hormonal disorder in women, yet it is one of the most under diagnosed diseases.

It adversely affects women at varying life stages, but unfortunately, half of the women with PCOS are unaware and ignorant about it. As it is a complex and multifaceted condition, it impacts women's health and well-being in a multitude of ways. Therefore, it is imperative to create awareness and emphasize prevention strategies.

Considering the steep rise in PCOS in women between the ages of 12 to 45, Tech Mahindra Foundation took the initiative to create awareness about PCOS through a webinar. The objective of this webinar was to educate everyone, especially girls, women and paramedics, about the symptoms, diagnosis, prevention, and treatment of Polycystic Ovarian Disease. PCOS affects a woman's hormones, and this hormonal imbalance causes a woman's body to skip menstrual periods resulting in excessive hair growth and androgen levels. This condition also makes it harder for women to conceive. The delay in diagnosis of PCOS can lead to the progression of comorbidities. So, being aware of the causes and symptoms of PCOS can help a woman get early treatment and prevent further health complications, such as obesity, diabetes, heart disease, infertility, etc.

PCOD (Polycystic Ovarian Disease) is a medical condition in women, where the ovaries produce multiple immature eggs which, over time, become cysts on the ovaries.

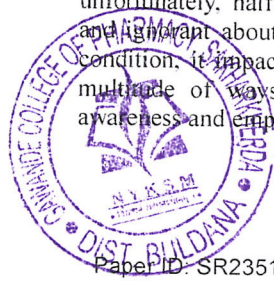
Ovaries are the reproductive organs of a female which control the menstrual cycle and the production of hormones like estrogen, progesterone, inhibin, relaxin etc. The accumulation of the eggs swells the ovary and makes it release large quantities of male hormone thus causing infertility.

PCOD is a hormonal condition that affects approximately 5-10% of women in their childbearing ages (12 to 45 - years). While the prevalence of PCOD differs, it affects around 9% to 22% of Indian women. The numbers are about 2% to 7% in China and Sri Lanka.

Volume 12 Issue 5, May 2023

www.ijsr.net

Licensed Under Creative Commons Attribution CC BY



In this condition, the hormones of a woman go out of balance which creates various symptoms, including the absence of ovulation, irregular menstrual cycle, difficulty conceiving, weight gain, acne, and hirsutism. PCOD, also

known as PCOS (Polycystic Ovarian Syndrome), if left untreated, can lead to further health complications. like diabetes, obesity, heart diseases, and high cholesterol.

What is the difference between PCOD and PCOS?

PCOD	PCOS
A condition where smaller cysts, less in number grow on ovaries, which may recede in three months with lifestyle changes.	A metabolic disorder wherein many cysts grow on both the ovaries, leading to ovaries stop releasing eggs.
A common disorder found in almost 10% of the women population across the world.	A serious condition which can be diagnosed in about 0.2 to 2.5% of the total women population of the world.
Infertility issues can be cured with some changes in lifestyle and medications.	Infertility issues are a bit more serious and even though pregnancy happens, risks of miscarriage and complications are high.
No serious complications on health.	Can lead to serious diseases like diabetes, heart disease, cancer, high blood pressure etc.
Periods can be regular or delayed.	Periods are always delayed or stopped.

2. Causes

The exact cause of PCOS isn't known. Factors that might play a role include:

Insulin resistance

Insulin is a hormone that the pancreas makes. It allows cells to use sugar, your body's primary energy supply. If cells become resistant to the action of insulin, then blood sugar levels can go up. This can cause your body to make more insulin to try to bring down the blood sugar level.

Too much insulin might cause your body to make too much of the male hormone androgen. You could have trouble with ovulation, the process where eggs are released from the ovary.

One sign of insulin resistance is dark, velvety patches of skin on the lower part of the neck, armpits, groin or under the breasts. A bigger appetite and weight gain may be other signs.

Low - grade inflammation

White blood cells make substances in response to infection or injury. This response is called low grade inflammation. Research shows that people with PCOS have a type of long - term, low - grade inflammation that leads polycystic ovaries to produce androgens. This can lead to heart and blood vessel problems.

Heredity

Research suggests that certain genes might be linked to PCOS. Having a family history of PCOS may play a role in developing the condition.

Excess androgen

With PCOS, the ovaries may produce high levels of androgen. Having too much androgen interferes with ovulation. This means that eggs don't develop on a regular basis and aren't released from the follicles where they

develop. Excess androgen also can result in hirsutism and acne.

Causes of PCOD include:

Family History

There is a 50% possibility of getting PCOD among the women whose immediate female relatives suffer from PCOD. As you grow older, this PCOD may lead to Type 2 diabetes, as PCOD is a risk factor for developing Diabetes till now, a single gene has not yet found to be the cause of PCOD, and it is likely to be complex and involve multiple genes.

Insulin resistance & Lifestyle

About 70% women with PCOD have peripheral insulin resistance. The pancreas produces insulin, which is a hormone to help the body use sugar from foods for energy. Due to insulin resistance the cells can't use insulin properly and the body's demand for insulin increases. To compensate, the pancreas makes more insulin.

Factors of Insulin Resistance:

- Insulin resistance as a result of genetic factors
- Insulin resistance as a result of being overweight (related to diet and inactivity)
- A combination of both of these factors

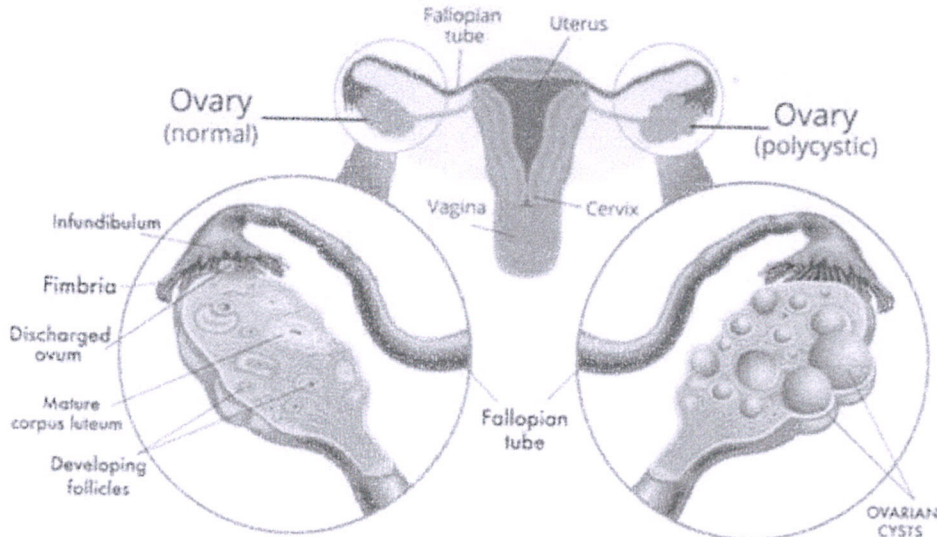
Inflammation

PCOS can lead to increased levels of inflammation in women. And being overweight also can contribute to inflammation. Studies have shown in PCOD that excess inflammation is linked to higher androgen levels.

Weight

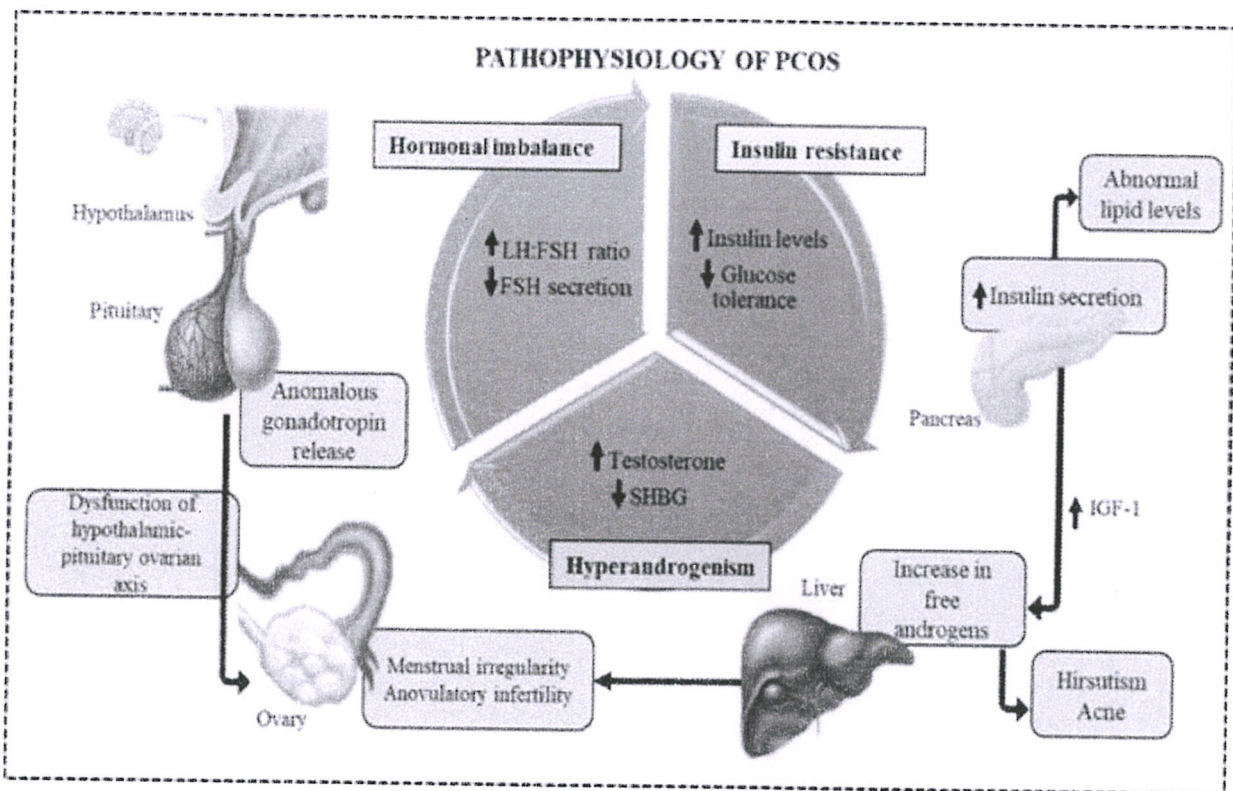
Sometimes, a higher weight may worsen insulin resistance and the symptoms of polycystic ovarian syndrome. Some women with PCOD report that they had never experienced symptoms such as menstrual irregularity or excessive hair growth and are a healthy weight. However, these symptoms only appear once they gain weight.





Difference between normal and polycystic ovary

3. Pathophysiology:



4. Deficiency Factor

Polycystic ovarian syndrome (PCOS) is a **hormonal imbalance** caused by the ovaries (the organ that produces

and releases eggs) creating excess male hormones. If you have PCOS, your ovaries produce unusually high levels of hormones called androgens. This causes your reproductive hormones to become imbalanced.



<p>VITAMIN B12</p> <ul style="list-style-type: none"> - Fertility - Formation of DNA - Nerve function - Improved insulin sensitivity - Red blood cell formation - Decreased fatigue 	<p>MAGNESIUM</p> <ul style="list-style-type: none"> - Muscle function - Nerve function - Improved blood sugar balance - Decrease inflammation - Better sleep 	
<p><i>5 Common Nutritional Deficiencies In Women With PCOS</i></p> <p>@pcos_to_wellness</p>		
<p>FOLATE</p> <ul style="list-style-type: none"> - Fertility - Healthy ovulation - Improved lipid levels - Decreased inflammation - Convert carbohydrates to energy 	<p>ZINC</p> <ul style="list-style-type: none"> - Fertility - Healthy ovulation - Skin and hair health - Improved insulin sensitivity - Reduce excess testosterone - Decreased inflammation 	<p>VITAMIN D</p> <ul style="list-style-type: none"> - Regulates hormones - Fertility - Healthy ovulation - Decreased hyperandrogenism - Improved blood sugar balance - Decreased inflammation

Low levels of sex produce milk in pregnancy. **hormone - binding globulin (SHBG)** – a protein in the blood that binds to testosterone and reduces its effect. raised levels of prolactin (only in some women with PCOS) – a hormone that stimulates the breast glands to produce milk in pregnancy.

PCOS women manifest a relatively high prevalence of vitamin D deficiency than healthy women, and vitamin D deficiency is associated with ovulatory dysfunction, IR and hyperandrogenism.

5. Signs and Symptoms

The symptoms of PCOS may include:

- Missed periods, irregular periods, or very light periods
- Ovaries that are large or have many cysts
- Excess body hair, including the chest, stomach, and back (hirsutism)
- Weight gain, especially around the belly (abdomen)
- Acne or oily skin
- Male - pattern baldness or thinning hair
- Infertility
- Small pieces of excess skin on the neck or armpits (skin tags)
- Dark or thick skin patches on the back of the neck, in the armpits, and under the breasts.

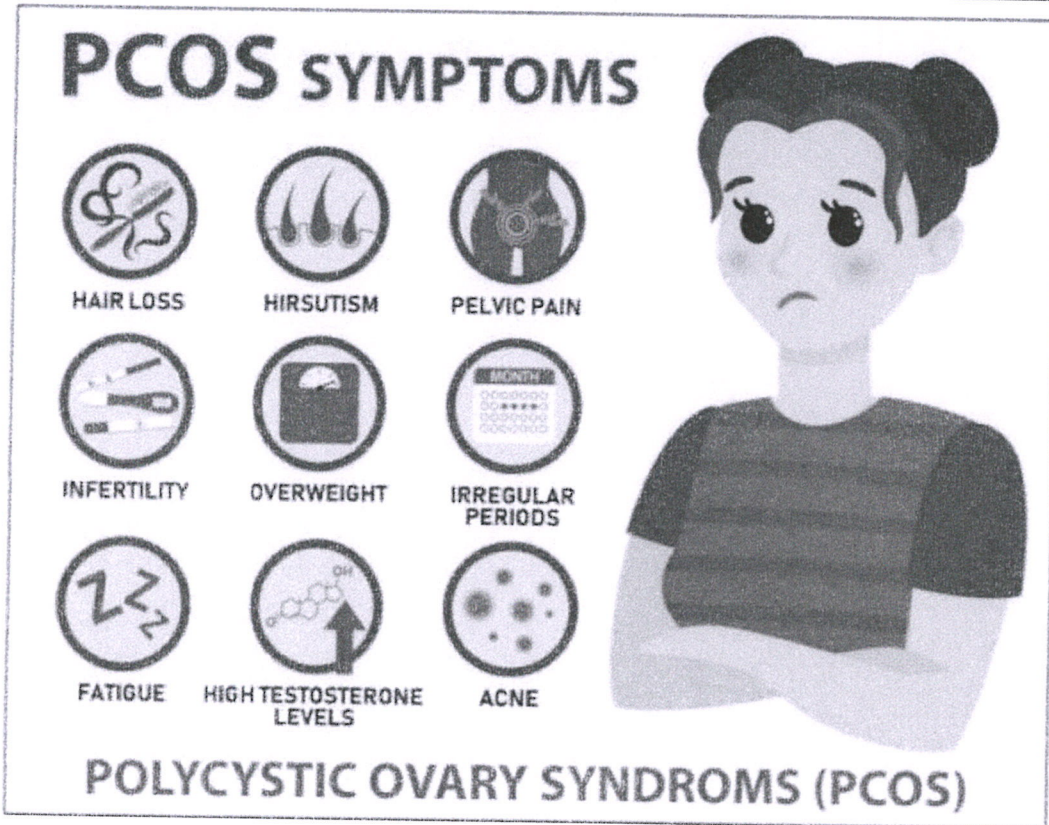
Common Symptoms of PCOD/PCOS:

The preliminary signs and symptoms of PCOD usually develop during the first cycle of menstruation at puberty. PCOD may also develop later due to increased weight over the years.

There are various symptoms of PCOD. Some of the common signs are

- Increased androgen levels. Excess male sex hormones may result in various physical manifestations, such as excess facial and body hair and male - pattern baldness.
- Irregular periods. You may observe irregular periods or delayed menstrual cycle due to the abnormality in maturation of the egg.
- Difficulty in getting pregnant due to irregular and delayed or failed ovulation. The hormone imbalance in the body prevent the follicles from maturing and releasing the egg, causing delayed or failed ovulation. This heavily affects the menstrual cycle and thereby your periods. Many women are diagnosed with PCOD when they visit the doctor regarding their unsuccessful attempts at getting pregnant.
- Hair loss or excessive thinning of hair. This symptom, too, is due to the increased production of male hormones in the body.
- Acne on the skin
- Weight gain





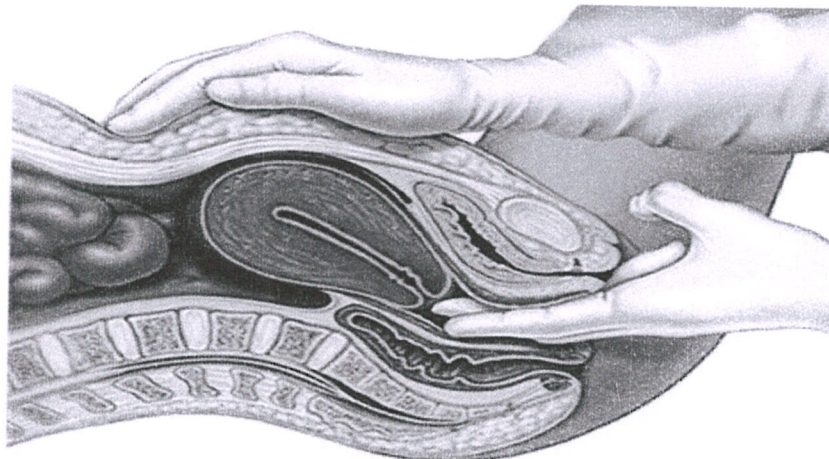
6. Diagnosis

There's no single test to specifically diagnose polycystic ovary syndrome (PCOS). Your health care provider is likely to start with a discussion of your symptoms, medications and any other medical conditions. Your provider also may ask about your menstrual periods and any weight changes. A

physical exam includes checking for signs of excess hair growth, insulin resistance and acne.

Your health care provider might then recommend:

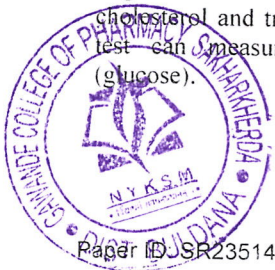
- **Pelvic exam.** During a pelvic exam, your provider can check your reproductive organs for masses, growths or other changes.

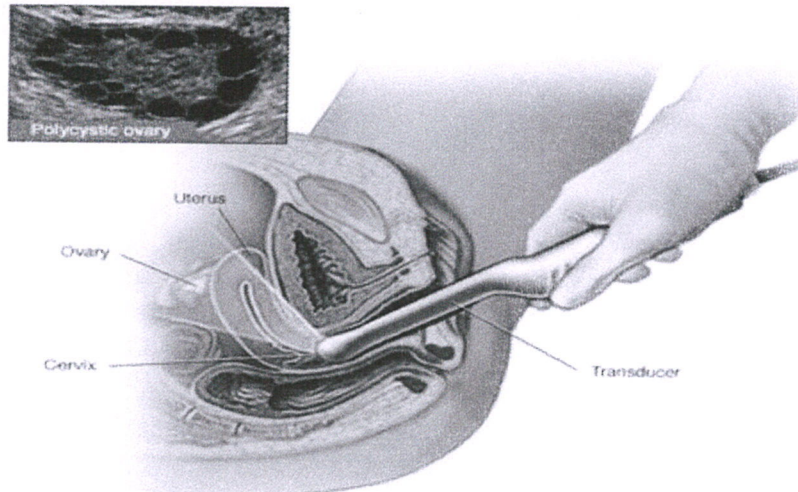


© SHARON FUSALBAZON FOR MEDICAL EDUCATION AND RESEARCH. ALL RIGHTS RESERVED.

- **Blood tests.** Blood tests can measure hormone levels. This testing can exclude possible causes of menstrual problems or androgen excess that mimic PCOS. You might have other blood testing, such as fasting cholesterol and triglyceride levels. A glucose tolerance test can measure your body's response to sugar (glucose).

- **Ultrasound.** An ultrasound can check the appearance of your ovaries and the thickness of the lining of your uterus. A wand like device (transducer) is placed in your vagina. The transducer emits sound waves that are translated into images on a computer screen.





© WIPRO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH. ALL RIGHTS RESERVED.

If you have a diagnosis of PCOS, your provider might recommend more tests for complications. These tests can include:

- Regular checks of blood pressure, glucose tolerance, and cholesterol and triglyceride levels
- Screening for depression and anxiety
- Screening for obstructive sleep apnea

7. Complications

Some complications can arise from PCOD. These include various diseases and medical conditions, such as

- Various metabolic syndromes, including high blood pressure, cardiovascular diseases, increased cholesterol and blood glucose levels.
- Miscarriages
- Infertility
- Gestational diabetes
- Sleep apnea
- Type 2 Diabetes
- Depression and other mental disorders
- Endometrial cancer
- Abnormal uterine bleeding
- Untreatable acne, displaying hormonal problems
- Chronic Liver inflammation

Studies also report that by the age of forty, approximately fifty per cent of women with PCOD would develop pre-diabetes or would already be diabetic, while many others would face infertility during their childbearing age.

Women with PCOS are more likely to develop certain serious health problems. These include type 2 diabetes, high blood pressure, problems with the heart and blood vessels, and uterine cancer. Women with PCOS often have problems with their ability to get pregnant (fertility).

8. Pharmacological Treatment

Post consultation, your doctor would recommend various medications to rectify your menstrual cycle. He may prescribe drugs such as

- Combinatorial birth control pill. These pills contain progestin and estrogen that reduce the production of the male sex hormones and regulate your hormones that let follicles release the egg, form acne and excess hair growth.
- Progestin therapy. Your doctor would advise you to take progestin for ten to fourteen days every month or two to regulate and correct your menstrual cycle in this medication.
- Immature follicles treatment. Your doctor may also recommend immature follicle aspiration PCOS treatment to improve your endocrinology and decrease the number of follicles in the ovary, thus facilitating pregnancy.
- Your doctor would prescribe drugs such as clomiphene, letrozole, metformin, and gonadotrophins to improve ovulation. To help reduce increase hair growth, your doctor would prescribe various birth control pills, spironolactone, and eflornithine.
- Although surgery is not the immediate options of choice, your doctor, in severe cases, may perform laparoscopic ovarian drilling, which would help trigger ovulation that is the release of the egg from the ovaries.

Monophasic oral contraceptive pill contains estrogen and progesterone.

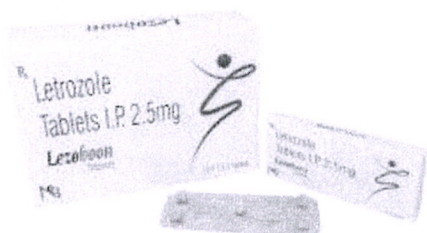


Clomiphene is used to induce ovulation (egg production) in women who do not produce ova (eggs) but wish to become pregnant (infertility). Clomiphene is in a class of medications called ovulatory stimulants. It works similarly to estrogen, a female hormone that causes eggs to develop in the ovaries and be released.





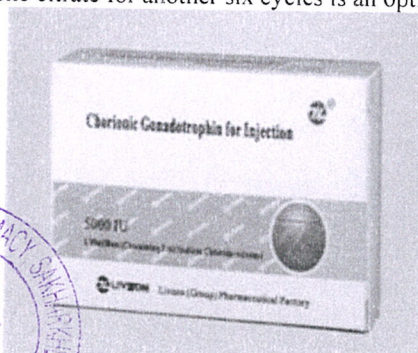
It inhibits estrogen production by repressing the enzyme **aromatase**. It has been reported that letrozole can inhibit estrogen levels by at least 97% to 99%. The other studies also reported that letrozole is effective in clomiphene - resistant patients, and also resulted in ovulation of 62% cases, and pregnancy of 14.7%.



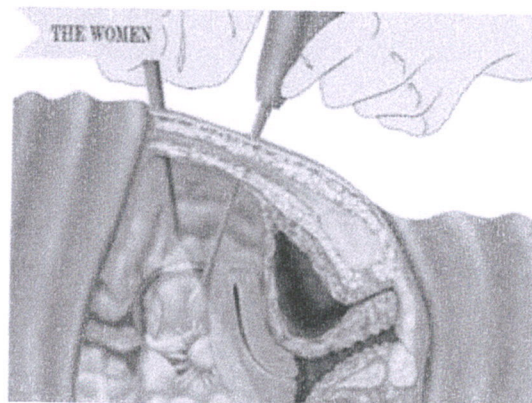
Several effects have been reported as related to metformin in PCOS patients including **restoring ovulation, reducing weight, reducing circulating androgen levels, reducing the risk of miscarriage and reducing the risk of gestational diabetes mellitus (GDM)**.



Gonadotrophins are the standard drugs in medical ovulation induction for women with PCOS, who did not ovulate or conceive on clomiphene citrate. In women who do ovulate on clomiphene citrate, continued clomiphene citrate for another six cycles is an option.



Laparoscopic ovarian drilling is a **surgical treatment for polycystic ovary syndrome (PCOS) that can help with ovulation**. Electrocautery or a laser is used to destroy parts of the ovaries. This surgery is not commonly used.



9. Non Pharmacological Treatment

Foods to consume in PCOD and PCOS

According to research, what people eat has a big impact on PCOD.

There is considerable agreement on which foods are good and appear to assist people in managing their disease and which foods should be avoided.

Three diets that may help PCOS patients manage their symptoms are listed below:

- **A diet with a low glycemic index (GI):** Meals with a low GI are digested more slowly by the body, which means they do not cause insulin levels to rise as much or as quickly as foods with a higher GI, such as some carbs. A low GI diet includes whole grains, legumes, nuts, seeds, fruits, non - starchy vegetables, and other unprocessed, low carbohydrate foods.
- **Anti - inflammatory foods:** This includes berries, fatty salmon, leafy greens, and extra virgin olive oil, which may help to alleviate inflammation - related symptoms.
- **The DASH diet:** To lower the risk or impact of heart disease, doctors frequently recommend the Dietary Approaches to Stop Hypertension (DASH) diet. It may also help with treating the PCOS symptoms.

The food items that must be included in PCOD are:

- Foods that are unrefined and natural!
- Fishes with high Omega fatty acids, such as salmon, tuna, sardines, and mackerel
- Leafy vegetables such as kale, spinach, broccoli
- Dark red fruit like crimson grapes, blueberries, blackberries, and cherries
- Healthy fats like olive oil, avocados, and coconuts and nuts, such as pine nuts, walnuts, almonds, and pistachios
- Spices, such as turmeric and cinnamon
- Dark chocolate in moderation



Avoid these foods to get rid of PCOD and PCOS

Patients with PCOD should avoid items that are already regarded as unhealthy in general. Here are a few examples:

- Refined carbohydrate sources include cakes, pastries and white bread.
- Fried food and fast food such as pizza and burgers

- Carbonated beverages, such as sodas and energy drinks. They are high in sugar.
- Processed meats, such as salami, sausages, and hot dogs, cured ham and bacon, along with luncheon meat.
- Margarine, shortening, and lard
- Red meat like steaks, pork and hamburgers

PCOS DIET CHART

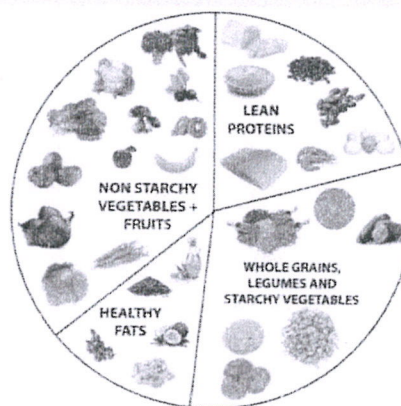


40% Fruits & Vegetables

25% Complex Carbs

30% Lean proteins

5% Healthy Fats

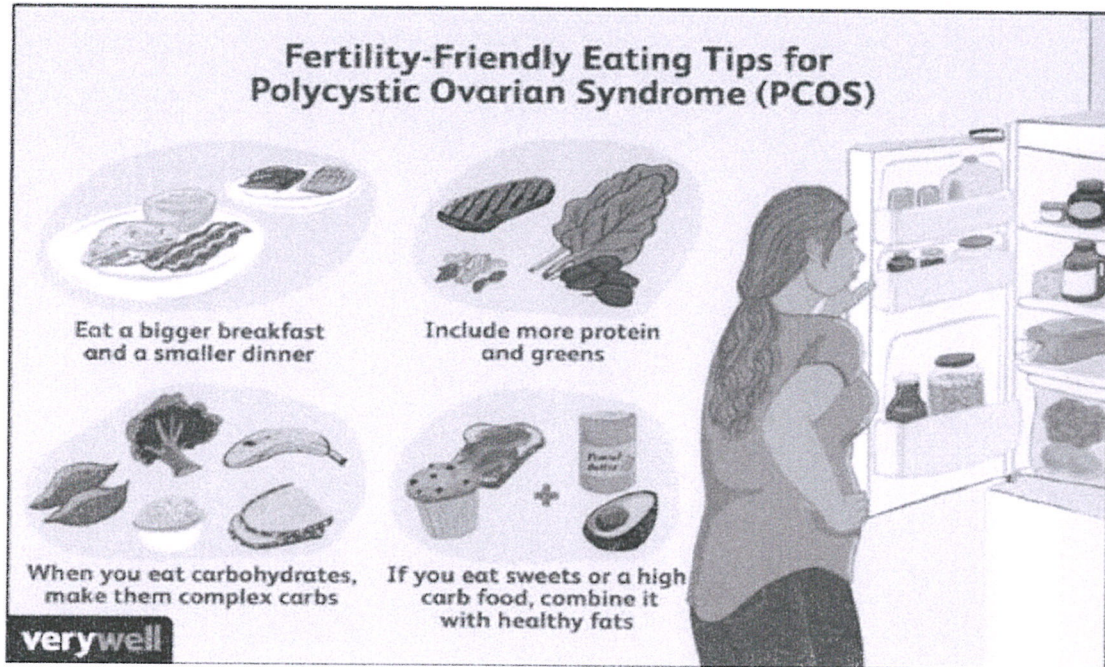


medhya herbs.com

Diet chart for PCOD patients

	Breakfast	Mid - meal	Lunch	Evening	Dinner
Sunday	2 Idlis with Sambar 1/2 cup and Green chutney or Tomato Chutney	1 cup green gram sprouts	2 Rotis, 1/2 cup salad with Fish curry (100 gm fish) and 1/2 cup cabbage subji.	A portion of fruit but avoid high sugar fruits like banana, Jack fruit, Mango, Chikku	2 Roti / chapati. + Tomato subji 1/2 cup.
Monday	2 Slices brown bread. +1 slice low - fat cheese+2 Boiled egg whites.	A portion of fruit but avoid high sugar fruits like banana, Jack fruit, Mango, Chikku.)	Veg pulao rice 1 cup+ 1/2 cup Soya Chunk curry+ 1/2 cup Butter Milk.	1) Cup light tea+ 2) Wheat rusks	2 roti/ Chapati+ Ladies finger subji 1/2 cup.
Tuesday	Chapati 2 + 1/2 cup green peas curry.	1/2 cup boiled black chana	1 cup rice+ 1/2 cup Dhal+ Palak subji 1/2 cup+ 1/2 cup low - fat curd.	A portion of fruit but avoid high sugar fruits like banana, Jack fruit, Mango, Chikku	Broken wheat upma 1 cup+ 1/2 cup green beans subji
Wednesday	Methi Parata 2+ 1 tbsp green chutney.	A portion of fruit but avoid high sugar fruits like banana, Jack fruit, Mango, Chikku.	1 cup rice+ chicken curry (150 gm chicken) + 1 cup cucumber salad.	1 cup light tea+ Brown rice flakes poha 1/2 cup.	Wheat Dosa 2 + 1/2 cup Bitter guard subji.
Thursday	Vegetable Oats Upma 1 cup+ 1/2 cup low - fat milk.	Plain Yoghurt and raw vegetables or 1 cup grilled vegetables	1/2 cup rice + 2 medium chappatis+1/2 cup Kidney beans curry+ Snake gourd subji 1/2 cup	1 cup boiled chana+1 cup light tea.	2 Roti/ chapati+ 1/2 cup mixed veg curry
Friday	Mixed veg Poha 1 cup+ 1/2 cup low fat milk	A portion of fruit but avoid high sugar fruits like banana, jack fruit, Mango, Chikku	2 Chapati + 1/2 cup cluster beans subji+ Fish curry (100 g fish) 1/2 cup	1 cup tea+ 2 biscuits (Digestive or oatmeal)	2 Roti/ chapati+ Ridge gourd sabji 1/2 cup
Saturday	2 Uthappam+ 1 tbsp green chutney.	1 cup boiled chana	1 cup rice+ soya chunk curry 1/2 cup+ Ladies finger sabji 1/2 cup+ 1/2 cup low - fat curd.	A portion of fruit but avoid high sugar fruits like banana, Jack fruit, Mango, Chikku	Broken wheat upma 1 cup+ 1/2 cup green beans subji





Along with following this diet chart, the patient must remember the following:

- Increase the diet of high - fiber carbohydrates gradually. Food high in lean protein should be prioritized.
- Include foods high in monounsaturated and omega - 3 fatty acids. Include lots of low glycemic index fruits and vegetables in the diet. Drink at least 2 litres of water.
- Exercise regularly
- Meals should not be skipped.
- Consume less amount of food in each meal.

Lifestyle change aiding in PCOD and PCOS

People with PCOD can also benefit from a change in their lifestyle. According to studies, combining a PCOD diet with physical exercise can result in the following advantages:

- Slimming down
- Increased insulin sensitivity
- More consistent periods
- Male hormone levels are lower
- Low cholesterol level

Women can use behavioral measures to assist them to reach their weight - loss goals, which will help them manage their PCOS symptoms. These are some of the practices:

- Social support networks for goal - setting
- Strategies for self - monitoring
- Taking care of one's mental health

Self - care habits like getting enough sleep, avoiding over - commitment, and setting aside time to unwind can also help with PCOD management.

When to seek medical attention?

Even though the diet is being followed, the patient might want to see a doctor if there is presence of following symptoms:

- Acne
- Excessive hair growth

- Weight gain, particularly around the stomach
- Oily skin
- Irregular periods
- Discomfort in the pelvic area
- Having trouble getting pregnant

Many people put off getting medical help until they are having trouble conceiving.

Anyone experiencing these symptoms should consult a Gynecologist about their concerns; the sooner they can begin therapy, the faster they will feel better.

The patient may become frustrated if they dealing with PCOD or any of its symptoms. Taking proactive measures to improve health can help them feel better and lessen the symptoms.

Making a good food/bad food list and sticking to it is one of the greatest methods to do this.

Almost every food that can make the illness worse has a healthier, more beneficial equivalent. For example, you can switch to high - fiber whole grain bread with olive oil or avocado if you are used to margarine and white toast for breakfast.

Ayurvedic Treatment:

Ayurvedic treatment for PCOS usually includes a combination of herbs, therapies, and lifestyle changes, such as diet.

Ayurvedic use of herbs for PCOS

Although Ayurvedic treatment of PCOS may vary among practitioners, it often involves the use of specific herbs, primarily to maintain a balance of hormones. These include:

- **Ashwagandha:** Ashwagandha is an herb that's also called Indian ginseng or winter cherry. It can help balance cortisol levels to improve stress and PCOS



symptoms, according to a 2016 study Trusted Source of 52 people under chronic stress.

- **Cinnamon:** Cinnamon, harvested from the bark of the cinnamon tree, is more than just a spice used in baked goods: According to a small 2007 study, it can positively affect insulin resistance parameters in PCOS. A 2014 study Trusted Source of 45 women indicated that cinnamon may play a role in regulating menstrual cycles for women with PCOS.
- **Turmeric:** Turmeric gets its yellow color from its active ingredient, curcumin. In a 2017 study Trusted Source on PCOS - induced rats, curcumin showed promise as an anti-inflammatory agent and as a way to decrease insulin resistance.

Ayurvedic therapies for PCOS

A 2012 study Trusted Source indicated that a 12-week yoga program helped reduce anxiety symptoms in adolescent girls with PCOS.

An Ayurvedic practitioner may recommend yoga poses, also called asanas, such as:

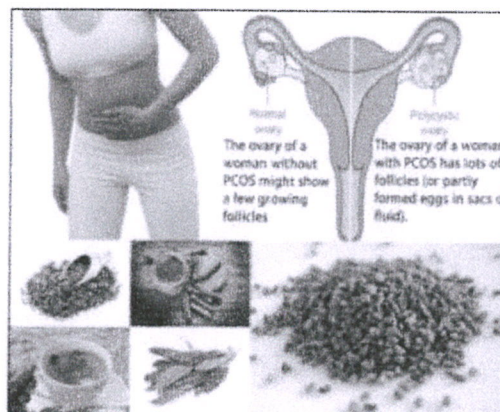
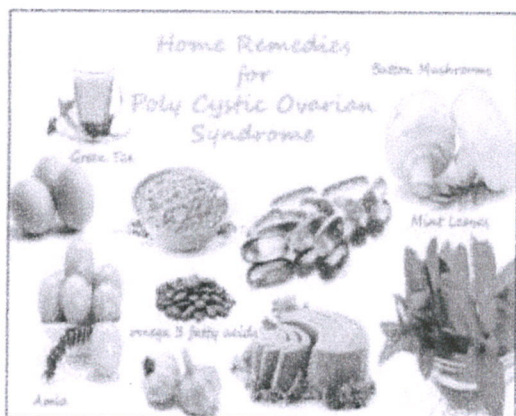
- Reclining Butterfly Pose (Supta Baddha Konasana)
- Bharadvaja's Twist (Bharadvajasana)
- Mill Churning Pose (Chakki Chalanasana)
- Corpse Pose (Shavasana)

Your practitioner may also recommend meditation and breathing exercises, known as pranayamas, to help relieve stress.

Ayurvedic diet for PCOS

The dietary practices an Ayurvedic practitioner recommends for PCOS will often be similar to what your primary care doctor might suggest, including:

- Eating fewer saturated fats (like red meat and deep fried foods)
- Reducing your salt intake
- Eating more fruits, vegetables, and whole grains
- Avoiding refined sugar, sugary foods, and artificial sweeteners

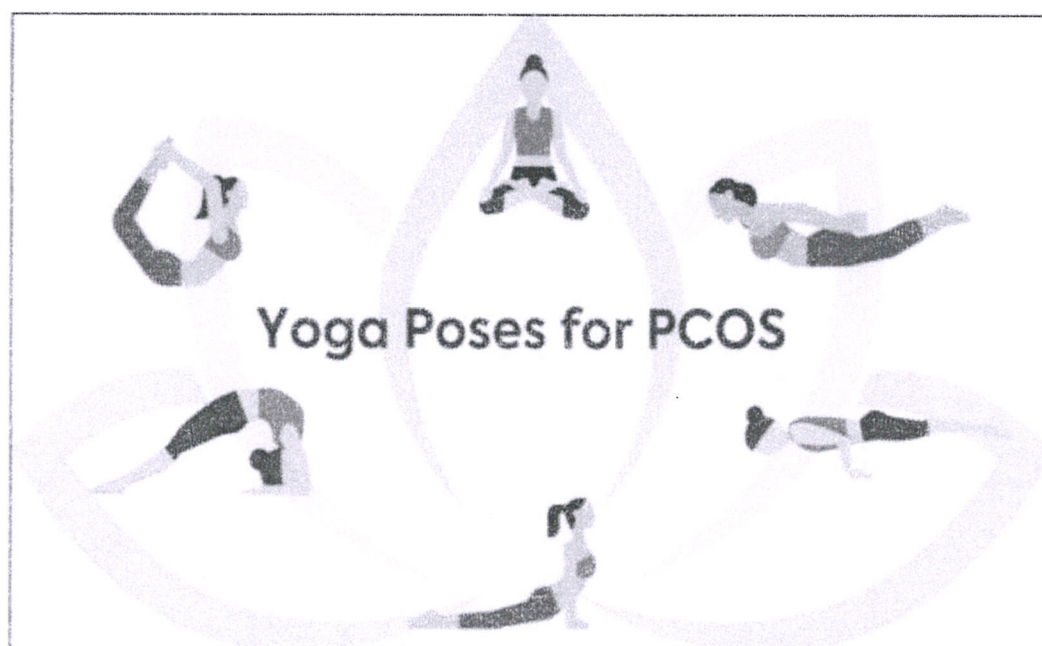


Ayurvedic Medication

Namyaa Aarthava Kshaya - for PCOD and PCOS' makes for this completely Ayurvedic tablet which is to help treat the root cause of PCOD and PCOS as part of the Ayurvedic principles of Stree Roga Chikitsa. PCOD is mainly caused due to faulty metabolism which is a Kapha disorder. This Ayurvedic tablet is known to help eliminate the toxins (Ama) that are known to reduce the rate of metabolism and thereby improves the metabolism. It is known to promote timely ovulation which regulates delayed and irregular periods. Not only does this powerful Ayurvedic tablet help restore hormonal balance, but also restores doshas imbalance, purifies the blood, improves fertility and immunity.



Yoga poses for PCOS and PCOD



10. Conclusion

There is no clear cause for PCOD and PCOS. However, early detection or diagnosis will be constructive in relieving the symptoms as well as to reduce the complications involved. PCOD and PCOS treatment helps you to manage your concerns, including infertility, hirsutism, **acne**, immature follicles, or obesity. However, specific treatment might involve lifestyle changes or medication.

References

- [1] Wu Q., Gao J., Bai D., Yang Z., Liao Q. The prevalence of polycystic ovarian syndrome in Chinese women: A meta - analysis. *Ann. Palliat. Med.*2021; 10: 74 - 87. doi: 10.21037/apm - 20 - 1893. [PubMed] [CrossRef] [Google Scholar]
- [2] Goyal A. ganie MA, Idiopathic Hyperprolactinemia Presenting as Polycystic Ovary Syndrome in Identical Twin Sisters: A Case Report and Literature Review. *Cureus.*2018 Jul 19 [PubMed PMID: 30250766]
- [3] Albu D, Albu A, The relationship between anti - Mullerian hormone serum level and body mass index in a large cohort of infertile patients. *Endocrine.*2018 Sep 20 [PubMed PMID: 30238328]
- [4] Spinedi E, Cardinali DP. The polycystic Ovary Syndrome: A Possible Chronobiotic - Cytoprotective Adjuvant Therapy. *International journal of endocrinology.*2018 [PubMed PMID: 30147722]
- [5] Hallajzadeh J, Khoramdad M, Karamzad N, Almasi - Hashiani A, Janati A, Ayubi E, Pakzad R, Sullman MJM, Safari S, Metabolic syndrome and its complications among women with polycystic ovary syndrome: a systematic review and meta - analysis. *Journal of cardiovascular and thoracic research.*2018 [PubMed PMID: 30114503]
- [6] Naya N, Gupte CB, Adanu RMK, Sarfo B, Ntuny M, Bonney EY, Lizneva D, Walker W, Azziz R, why we need epidemiologic studies of polycystic ovary syndrome in Africa. *International journal of gynaecology and obstetrics: the official organ of the International Federation of Gynaecology and Obstetrics.*2018 Nov [PubMed PMID: 30092610]
- [7] Marciniak A, Lejman - Larysz K, Nawrocka - Rutkowska J, Brodowska A, Songin D, [Polycystic ovary syndrome - current state of knowledge]. *PolskiMerkuriuszLekarski: organ PolskiegoTowarzystwaLekarskiego.*2018 Jun 27 [PubMed PMID: 30057399]
- [8] Sala Elpidio LN, de Alencar JB, Tsuneto PY, Alves HV, Trento Toretta M, IT Taura SK, LaguilaVisentainer JE, Sell AM, Killer - cell immunoglobulin - like receptors associated with polycystic ovary syndrome. *Journal of reproductive immunology.*2018 Aug 4 [PubMed PMID: 30099219]
- [9] Shorakae S, Ranasinha S, Abell S, Lambert G, Lambert E, de Courten B, Teede H, Inter - related effects of insulin resistance, hyperandrogenism, sympathetic dysfunction and chronic inflammation
- [10] Xie J, Burstein F, Garad R, Teede HJ, Boyle JA, Personalized Mobile Tool AskPCOS Delivering Evidence - Based Quality Information about Polycystic Ovary Syndrome, *Seminars in reproductive medicine.*2018 Jan [PubMed PMID: 30189453]
- [11] Boyle JA, Xu R, Gilbert E, Kuczynska - Burggraf M, Tan B, Teede H, Vincent A, Gibson - Helm M, Ask PCOS: Identifying Need to Inform Evidence - Based App Development for Polycystic Ovary Syndrome. *Seminars in reproductive medicine.*2018 Jan [PubMed PMID: 30189452]
- [12] Misso ML, Tassone EC, Costello MF, Dokras A, Laven J, Moran LJ, Teede HJ, Large - Scale Evidence - Based Guideline Development Engaging the International PCOS Community. *Seminars in reproductive medicine.*2018 Jan [PubMed PMID: 30189448]

Volume 12 Issue 5, May 2023

www.ijsr.net

Licensed Under Creative Commons Attribution CC BY

- [13] Tay CT, Moran LJ, Wijeyaratne CN, Redman LM, Norman RJ, Teede HJ, Joham AE, Integrated Model of Care for Polycystic Ovary Syndrome. *Seminars in reproductive medicine*.2018 Jan [PubMed PMID: 30189456]
- [14] Htet T, Cassar S, Boyle JA, Kuczynska - Burggraf M, Gibson - Helm M, Chiu WL, Stepto NK, Moran LJ, Informing Translation: The Accuracy of Information on Websites for Lifestyle Management of Polycystic Ovary Syndrome. *Seminars in reproductive medicine*.2018 Jan [PubMed PMID: 30189455]
- [15] Glinborg D, Altinok MZ, Mumm H, Hermann AP, Ravn P, Andersen M, Body composition is improved during 12 months' treatment with metformin alone or combined with oral contraceptives compared with treatment with oral contraceptives in polycystic ovary syndrome. *The Journal of clinical endocrinology and metabolism*.2014 Jul; [PubMed PMID: 24742124]
- [16] Lizneva D., Suturina L., Walker W., Brakta S., Gavrilova - Jordan L., Azziz R. Criteria, prevalence, and phenotypes of polycystic ovary syndrome. *Fertil. Steril*.2016; 106: 6–15. doi: 10.1016/j.fertnstert.2016.05.003. [PubMed] [CrossRef] [Google Scholar]
- [17] Liu J., Wu Q., Hao Y., Jiao M., Wang X., Jiang S., Han L. Measuring the global disease burden of polycystic ovary syndrome in 194 countries: Global Burden of Disease Study 2017. *Hum. Reprod*.2021; 36: 1108–1119. doi: 10.1093/humrep/deaa371. [PMC free article] [PubMed] [CrossRef] [Google Scholar]
- [18] Safiri S., Noori M., Nejadghaderi S. A., Karamzad N., Carson - Chahhoud K., Sullman M. J. M., Collins G. S., Kolahi A. A., Avery J. Prevalence, incidence and years lived with disability due to polycystic ovary syndrome in 204 countries and territories, 1990–2019. *Hum. Reprod*.2022; 37: 1919–1931. doi: 10.1093/humrep/deac091. [PubMed] [CrossRef] [Google Scholar]
- [19] Glueck C. J., Goldenberg N. Characteristics of obesity in polycystic ovary syndrome: Etiology, treatment, and genetics. *Metabolism*.2019; 92: 108–120. doi: 10.1016/j.metabol.2018.11.002. [PubMed] [CrossRef] [Google Scholar]
- [20] Legro R. S., Kunselman A. R., Dodson W. C., Dunaif A. Prevalence and predictors of risk for type 2 diabetes mellitus and impaired glucose tolerance in polycystic ovary syndrome: A prospective, controlled study in 254 affected women. *J. Clin. Endocrinol. Metab*.1999; 84: 165–169. doi: 10.1097/00006254 - 199906000 - 00019. [PubMed] [CrossRef] [Google Scholar]
- [21] Kakoly N. S., Khomami M. B., Joham A. E., Cooray S. D., Misso M. L., Norman R. J., Harrison C. L., Ranasinha S., Teede H. J., Moran L. J. Ethnicity, obesity and the prevalence of impaired glucose tolerance and type 2 diabetes in PCOS: A systematic review and meta - regression. *Hum. Reprod. Update*.2018; 24: 455–467. doi: 10.1093/humupd/dmy007. [PubMed] [CrossRef] [Google Scholar]
- [22] Sarda A, Dos Reis FM, Candido AL, Nunes FFC, Ferreira Gomes KB. Polycystic Ovary Syndrome as a Systemic disease with multiple molecular pathways: a narrative review. *Endocrine regulations*.2018 Oct 1 [PubMed PMID: 31517612]
- [23] Sagvekar P., Shinde G., Mangoli V., Desai S. K., Mukherjee S. Evidence for TET - mediated DNA demethylation as an epigenetic alteration in cumulus granulosa cells of women with polycystic ovary syndrome. *Mol. Hum. Reprod*.2022; 28: gaac019. doi: 10.1093/molehr/gaac019. [PubMed] [CrossRef] [Google Scholar]
- [24] Guo J., Shao J., Yang Y., Niu X., Liao J., Zhao Q., Wang D., Li S., Hu J. Gut Microbiota in Patients with Polycystic Ovary Syndrome: A Systematic Review. *Reprod. Sci*.2022; 29: 69–83. doi: 10.1007/s43032 - 020 - 00430 - 0. [PubMed] [CrossRef] [Google Scholar]
- [25] Li R., Zhang Q., Yang D., Li S., Lu S., Wu X., Wei Z., Song X., Wang X., Fu S., et al. Prevalence of polycystic ovary syndrome in women in China: A large community - based study. *Hum. Reprod*.2013; 28: 2562–2569. doi: 10.1093/humrep/det262. [PubMed] [CrossRef] [Google Scholar]
- [26] Chen Z. J., Zhao H., He L., Shi Y., Qin Y., Shi Y., Li Z., You L., Zhao J., Liu J., et al. Genome - wide association study identifies susceptibility loci for polycystic ovary syndrome on chromosome 2p16.3, 2p21 and 9q33.3. *Nat. Genet*.2011; 43: 55–59. doi: 10.1038/ng.732. [PubMed] [CrossRef] [Google Scholar]
- [27] Puttabyatappa M, Padmanabhan V, Ovarian and Extra - Ovarian Mediators in the Development of Polycystic Ovary Syndrome. *Journal of molecular endocrinology*.2018 Oct 16 [PubMed PMID: 29941488]
- [28] Shi Y., Zhao H., Shi Y., Cao Y., Yang D., Li Z., Zhang B., Liang X., Li T., Chen J. Genome - wide association study identifies eight new risk loci for polycystic ovary syndrome. *Nat. Genet*.2012; 44: 1020–1025. doi: 10.1038/ng.2384. [PubMed] [CrossRef] [Google Scholar]
- [29] Tian Y., Li J., Su S., Cao Y., Wang Z., Zhao S., Zhao H. PCOS - GWAS Susceptibility Variants in THADA, INSR, TOX3, and DENND1A Are Associated with Metabolic Syndrome or Insulin Resistance in Women with PCOS. *Front. Endocrinol*.2020; 11: 274. doi: 10.3389/fendo.2020.00274. [PMC free article] [PubMed] [CrossRef] [Google Scholar]
- [30] Liu Q., Zhu Z., Kraft P., Deng Q., Stener - Victorin E., Jiang X. Genomic correlation, shared loci, and causal relationship between obesity and polycystic ovary syndrome: A large - scale genome - wide cross - trait analysis. *BMC Med*.2022; 20: 66. doi: 10.1186/s12916 - 022 - 02238 - y. [PMC free article] [PubMed] [CrossRef] [Google Scholar]
- [31] Norman RJ, Teede HJ, A new evidence - based guideline for assessment and management of polycystic ovary syndrome. *The Medical journal of Australia*.2018 Sep 1 [PubMed PMID: 30257632]
- [32] Liu Q., Tang B., Zhu Z., Kraft P., Deng Q., Stener - Victorin E., Jiang X. A genome - wide cross - trait analysis identifies shared loci and causal relationships of type 2 diabetes and glycaemic traits with polycystic ovary syndrome. *Diabetologia*.2022; 65: 1483–1494.

- doi: 10.1007/s00125 - 022 - 05746 - x. [PMC free article] [PubMed] [CrossRef] [Google Scholar]
- [33] Azziz R. PCOS in 2015: New insights into the genetics of polycystic ovary syndrome. *Nat. Rev. Endocrinol.*2016; 12: 74–75. doi: 10.1038/nrendo.2015.230. [PubMed] [CrossRef] [Google Scholar]
- [34] Lambertini L., Saul S. R., Copperman A. B., Hammerstad S. S., Yi Z., Zhang W., Tomer Y., Kase N. Intrauterine Reprogramming of the Polycystic Ovary Syndrome: Evidence from a Pilot Study of Cord Blood Global Methylation Analysis. *Front. Endocrinol.*2017; 8: 352. doi: 10.3389/fendo.2017.00352. [PMC free article] [PubMed] [CrossRef] [Google Scholar]
- [35] Barr S., Hart K., Reeves S., Sharp K., Jeanes Y. M. Habitual dietary intake, eating pattern and physical activity of women with polycystic ovary syndrome. *Eur. J. Clin. Nutr.*2011; 65: 1126–1132. doi: 10.1038/ejcn.2011.81. [PubMed] [CrossRef] [Google Scholar]
- [36] Lindheim L., Bashir M., Munzker J., Trummer C., Zachhuber V., Leber B., Horvath A., Pieber T. R., Gorkiewicz G., Stadlbauer V., et al. Alterations in Gut Microbiome Composition and Barrier Function Are Associated with Reproductive and Metabolic Defects in Women with Polycystic Ovary Syndrome (PCOS): A Pilot Study. *PLoS ONE.*2017; 12: e0168390. doi: 10.1371/journal.pone.0168390. [PMC free article] [PubMed] [CrossRef] [Google Scholar]
- [37] Torres P. J., Siakowska M., Banaszewska B., Pawelczyk L., Duleba A. J., Kelley S. T., Thackray V. G. Gut Microbial Diversity in Women with Polycystic Ovary Syndrome Correlates with Hyperandrogenism. *J. Clin. Endocrinol. Metab.*2018; 103: 1502–1511. doi: 10.1210/jc.2017 - 02153. [PMC free article] [PubMed] [CrossRef] [Google Scholar]
- [38] Carvalho LML, Dos Reis FM, Candido AL, Nunes FFC, Ferreira CN, Gomes KB. Polycystic Ovary Syndrome as a systemic disease with multiple molecular pathways: a narrative review. *Endocrine regulations.*2018 Oct 1 [PubMed PMID: 31517612]
- [39] Zhang C, Ma J, Wang W, Sun Y, Sun K, Lysyl oxidase blockade ameliorates anovulation in polycystic ovary syndrome. *Human reproduction (Oxford, England).*2018 Sep 29 [PubMed PMID: 30272163]
- [40] Insenser M., Murri M., Del Campo R., Martinez - Garcia M. A., Fernandez - Duran E., Escobar - Morreale H. F. Gut Microbiota and the Polycystic Ovary Syndrome: Influence of Sex, Sex Hormones, and Obesity. *J. Clin. Endocrinol. Metab.*2018; 103: 2552–2562. doi: 10.1210/jc.2017 - 02799. [PubMed] [CrossRef] [Google Scholar]
- [41] Heshmati J., Farsi F., Yosae S., Razavi M., Rezaeinejad M., Karimie E., Sepidarkish M. The Effects of Probiotics or Synbiotics Supplementation in Women with Polycystic Ovarian Syndrome: A Systematic Review and Meta - Analysis of Randomized Clinical Trials. *Probiotics Antimicrob. Proteins.*2019; 11: 1236–1247. doi: 10.1007/s12602 - 018 - 9493 - 9. [PubMed] [CrossRef] [Google Scholar]
- [42] Wang X., Xu T., Liu R., Wu G., Gu L., Zhang Y., Zhang F., Fu H., Ling Y., Wei X., et al. High - Fiber Diet or Combined with Acarbose Alleviates Heterogeneous Phenotypes of Polycystic Ovary Syndrome by Regulating Gut Microbiota. *PLoS ONE.*2019; 14: e0214444. doi: 10.1371/journal.pone.0214444. [PubMed] [CrossRef] [Google Scholar]



Nehru Yuva Krida & Sanskrutik Mandal, Chikhli's

GAWANDE COLLEGE OF PHARMACY

Lavala Road, Sakharkherda, Tq. Sindkhed Raja, Dist. Buldana (M.S.) - 443202

Phone 07264-266212 Email - gcpkherda@gmail.com Website : www.gawandecollegeofpharmacy.org.in

Prof. N. S. Gawande
Secretary
Mob 9822364082

GCP/PLAC/1002

Date : 04/06/18

PLACEMENT CELL

Formation of Students' Placement Committees for final placement and also for getting industrial training and industry linked project work for students.

- Preparation of Placement Brochure for final placement.
- Pre-placement visits (PPV) to the companies.
- Communication, networking and relationship building with the potential recruiters
- Invitation to potential recruiters to visit the Institute.
- Continuation of placement activities after the stipulated period, till all the students are placed.
- Grooming and training of the candidates for the placements so that their chances of selection increase.
- General follow-up, joining formalities and other administrative activities.

Sr.No	Name of members	Designation	Mobile No	SIGN
01	Mr. Y.B.Raut	Chairman	9921138227	yrault15@gmail.com
02	Miss M.S.Nikam	Convener	9423759985	msnikam12@gmail.com
04	Mr.P.R.Hiwale	Member	9112945267	hrishihiwale@gmail.com
05	Mr.A.G.Jadhao	Member	9359080067	agjadhao@gmail.com
05	Adv.T.A.Shaikh	Member	9881956450	shailkhll@gmail.com

Principal

Principal
Gawande College of Pharmacy
Sakharkherda, Tq. Sindkhed Raja
Dist. Buldana (MH)

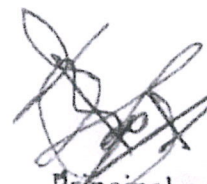


GAWANDE COLLEGE OF PHARMACY, SAKHARKHERDA
LIST OF STUDENT PLACEMENT THROUGH THE PLACEMENT CELL

Sr.No	Name Of Student	Year Of Passing	Placement Details
01	Mrs. Shivani Kale		
02	Mrs. Vanita M Kharat	2016	M.R.
03	Mr. Sheikh Aslam Sheikh	2016	Hospital Pharmacist
04	Mrs. Vaishnavi Amulkar	2017	Hospital Pharmacist
05	Mr. Shubham V. Joshi	2017	Hospital Pharmacist
06	Mr. Rushi Berad	2017	Retail Pharmacy Store
07	Mr. Shubham Doiiphode	2017	Retail Pharmacy Store
08	Mr. Mayur Meshram	2017	Retail Pharmacy Store
09	Miss. Sandhya Sonsale		
10	Miss. Shambala Sonalkar	2018	MR.
11	Miss. Uma Thokal	2018	Retail Pharmacy Store
12	Miss. Kajal Suradkar	2018	Hospital Pharmacist
13	Mr. Mahendra Deshmukh	2018	Hospital Pharmacist
14			Retail Pharmacy Store
15			



Placement Cell Incharge



Principal

