



*Research Article*

**STUDY THE EFFECT OF *PURAN MADHU* (OLD HONEY) IN *MEDODHATU VRUDHI*(OBESITY) W.S.R. LIPID PROFILE**

Potkule Vijay R.<sup>1</sup>, Surse Yogesh S.<sup>2</sup>, Ahire Narendra R.<sup>3</sup>

Assistant professor <sup>1,2,3</sup>

<sup>1</sup> Dept. of Sharir Kriya, <sup>2</sup> Dept. of Kaumar Bhritya, <sup>3</sup> Dept. of Rasashastra and Bhaishajya Kalpana  
Shri Saptashrunji Ayurved Mahavidyalaya, Nashik, Maharashtra, India.

\*Corresponding Author: Dr. Potkule Vijay R., E-mail: [drvijayrao85@gmail.com](mailto:drvijayrao85@gmail.com)

Article Received on: 30/11/2017

Accepted on: 21/12/2017

**ABSTRACT:**

According to WHO the world wide latest report every year afflicting about 7% of adult population. Total health-care expenditure for obesity patients is estimated to be around 2-8% of total health cost. British medical journal states that two decades ago 1/3 of population worldwide was suffering from obesity. As per its report, obesity causes 30.000 deaths per year observations of intellectual seers from India

Obesity is medical condition in which excess body fat has accumulated to the extent that it may have an adverse effect on health, leading to reduce life expectancy and/or increase health problems. Particularly heart disease, type 2 diabetes, breathing difficulties during sleep, certain type of cancer, and osteoarthritis. *Sharir kriya* deals with the study of '*Prakruti*' & '*Vaikrut*' *awastha* of *Dosha, Dhātu & Mala*. *Ayurveda* has better provision to achieve above features and live a healthy life. We are going to discuss one of basic principle regarding *Medodhatuvrudhi*. *Madhu* (Honey) is majorly used for therapy of *Lekhana Karma* in *ayurveda*. Especially '*Purana Madhu*' (More than one year old honey) is more effective in *Medodhatuvrudhi* and *sthoulya* disease<sup>1</sup>.

In this study *Puran Madhu* shows significant changes in all subjective criteria of Individuals having *Medodhatuvrudhi*. *Puran Madhu* shows significant changes in all objective criteria and in Serum Cholesterol, HDL, LDL, VLDL, Triglyceride total. *Puran Madhu* is also effective that increases the level of HDL which is good Cholesterol for body.

**KEY WORDS:** *Puran Madhu, Medadhatu vrudhi, Obesity.*

**INTRODUCTION:**

*Sthoulya* (Obesity) is a social, Psychological, somatic and economical problem leading to miserable condition and causing a challenge to the physician. It is increasing in prevalence and posing a serious risk for the development of diabetes mellitus, hypertension, heart diseases, gall bladder diseases and certain forms of cancer. A *sthula* (Obese) person has been described as "*Nindita*" (Worst) despicable personality since ancient times<sup>2</sup>. Classics have dealt this disease under the heading of *sthoulya* with its different aspects and mentioned different principles of management. Acharya Sushruta stresses about prevention of *sthoulya* and says that, *Sthula* are *sadaturas* (always sick) and need regular and continuous treatment, hence prevention is the best way of management.

The one who is having balanced proportion of muscles, compactness and firmness in organs does

not fall prey to prowess of a disorder. The person having balanced musculature has got tolerance for hunger, thirst, heavy sun light, cold and exercise; balanced Agni (digestive power) and normal metabolism<sup>3</sup>. *Madhu* (Honey) is majorly used for therapy of *Lekhana Karma* in *ayurveda*. Especially '*Purana Madhu*' is more effective in *Medodhatuvrudhi* and *sthoulya* disease.

**Aim:**

Study the effect of *puran madhu* on *medovridhi* in persons having *Medodhatuvrudhi* with respect to serum lipid profile.

**Objectives:**

1. To study the sign, symptoms & pathophysiology of *Medodhatuvrudhi*
2. To study the effect of *puran madhu* on *Medodhatuvrudhi* with respect to serum lipid profile.

**MATERIALS AND METHODS:****Study Design:**

Collection and Preservation of honey.

Selection of individuals

Instruments used in study. –

1. Weighing machine . 3. Measuring tape.
2. Analyzer. 4. Reagent of Lipid Profile

**Duration** - 30 days for each individuals of experimental group. Expected duration for drug study is depending upon the type of product, its potency, efficacy, safety etc. 30 days period was sufficient to observe the effects of *madhu* in individuals having *Medovrudhi*.

**Time- Praghakta** (before ½ hour of lunch & dinner) According to *Vagbhata (Astanga Sangraha) Praghagta* (just prior to the meal) is a proper time to take a medicine for strengthening the body and for making body thin (*Krushikaranartha*). So it was decided to give *Madhu* ½ hour to 15 min prior to the lunch and dinner. The material used for study is *Puran Madhu*

**Dose - 15 mg.**<sup>4</sup> Normal dose of *madhu* is ½ to 3 *Tola*. i.e. 5 to 30 mg approximately according to modern scale. We decided to give *Madhyam matra* (Middle dose) which is 15 mg it every individual.

**Methods:**

Study design is majorly divided in two main parts. 1. To select the individuals having *Medovruddhi*.

To study the effect of honey on individuals having *Medovruddhi*. Total 60 healthy individuals have been selected.

Total 60 healthy individuals have been selected. According to criteria of selection, this study is divided in two groups –

Group - A (Experimental Group):- The honey was given to 30 individuals having *Medodhatuvruddhi* having BMI more than 25 and Waist Hip ratio more than 1.

Group - B (Control Group):- 30 persons of *Medodhatuvruddhi* having BMI more than 25 and Waist-Hip ratio more than 1 were taking only routine normal diet.

**Inclusion criteria –**

Male & female individuals of age group 20 to 40 yrs have been selected irrespective of their socio economical status.

The persons having BMI more than 25Kg/m<sup>2</sup> have been selected.

The persons having waist hip ratio more than 1 have

been selected

**Exclusion criteria**

The persons having endocrinal disorders, diabetes, major heart diseases, hypertension, and such major illness have been rejected.

Individuals taking honey in their regular diet have been rejected. 70

Individuals taking any *medohar dryavya* (Fat reducing medicine) or any medicine for obesity have been rejected.

**Subjective criteria.**

Symptoms Grades'- ' or '+' Grades in no. 1 *Swedadhikya*, 2 *Kshudadhikya*, 3 *Trushnadhikya*, 4 *Nidradhikya*, 5 *Ksudrashwasa*, 6 *Dorgandhya*.

**Questionnaire:****1. Increased Sweating (Swedadhikya)**

Normal - No sweating at normal room temperature.

+ Sweating at normal room temperature on palms, sole, and feeling of sweating all over the body.

++ Continuous sweating at normal room temperature.

+++ Wet all over body and cloths. Repeated wetting of cloths At normal room temperature.

**2. Increased Hunger (Kshudhadhikya)**

Normal- Desire to eat at normal meal time and satisfaction after meal.

+ Unsatisfied even after meal at normal meal time.

++ Unsatisfied even after meal at normal meal time and if does not get food then feels weakness.

+++ Hunger all time. No satisfaction after meal.

**3. Increased thirst (Trushnadhikya)**

Normal- drink water/ liquid 5-6 times in all whole day time.

+. Drink water at interval of 2 hrs in a day.

++. Drink water at interval of 1 hrs in a day and awake 1-2 times at night.

+++. Drink water many times in a day and 3-4 times at night.

**4. Increased sleep (Nidradhikya)**

Normal – felling of freshness of Indriyas after sleep.

+. Normal sleep but feeling of freshness absent in Indriyas.

++. Excess sleep and feels no freshness in Indriyas.

+++. Continuous feelling of sleep and unable to do work.

**5. Breathlessness (Kshudraswasa).**

Normal: No breathlessness even after continuous physical work for 1-3 hrs.

- +. Breathlessness after continuous physical work for 1/2-1 hr.
- ++. Breathlessness after continuous sitting work for 1/2-1 hr.
- +++. Breathlessness after little work.

**6. Body odour (Dourgandhya).**

Normal: No body odour in all seasons.

- +. Odour in 4-5 hrs after bath in all seasons.
- ++. Odour in 2-3 hrs after bath in all seasons.

+++. Odour in 1 hr after bath in all seasons.

**Objective Criteria -**

BMI = Weight/Height in Meter square. (m)<sup>2</sup>

**Table no 1 - BMI Gradation**

Grade	BMI
0	Between 25 to 30
1	Between 30 to 35
2	Between 35 to 40
3	Above 40

Waist hip ratio = waist in cm/ hip in cm

**OBSERVATIONS & RESULTS:**

**Table no 2:** Comparison of Weight, BMI, Waist, Hip and Waist-Hip ratio; before and after study in experimental group and control group.

Variables		Experimental Group	Control group	'F' value	't' value	P for 't'
Weight	Before	76.77±6.532	76.87±6.479	1.016	0.05953	NS
	After	74.57±6.678	75.93±6.898	1.067	0.7797	NS
	Difference	2.2	0.9333			
	't' value	16.868	5.215			
	P value	<0.0001***	<0.0001***			
BMI	Before	31.39±0.7784	31.60±2.270	8.504	-	-
	After	30.48±0.8227	31.20±2.217	7.263	-	-
	Difference	0.9093	0.403			
	't' value	15.37	5.307			
	P value	<0.0001***	<0.0001***			
Waist	Before	90.87±5.812	93.37±5.353	1.179	1.733	NS
	After	89.17±5.621	92.37±5.308	1.121	2.267	0.05
	Difference	1.700	1.000			
	't' value	17.40	6.021			
	P value	<0.0001***	<0.0001***			
Hip	Before	85.23±5.606	85.67±5.473	1.049	0.3029	NS
	After	84.60±5.430	85.33±5.346	1.032	0.5271	NS
	Difference	0.6333	0.3333			
	't' value	3.898	2.276			
	P value	0.0005***	<0.0304*			
WHR	Before	1.0671±0.04	1.091±0.04649	1.023	2.020	0.05
	After	1.055±0.0464	1.084±0.04635	1.003	2.393	0.02
	Difference	0.012119	0.007565			
	't' value	4.8923	3.861			
	P value	0.0001***	<0.0006***			

**Table 3:** Comparison of lipid parameters after treatment in two groups studied

Variables		Experimental Group	Control group	'F' test
CHL	Before	265.07±38.39	271.97±36.13	1.129
	After	220.93±16.83	277.4±40.95	5.917
	Difference	44.13	-91.17	
	P value	<0.001**	0.289	
HDL	Before	28.60±3.69	30.67±2.70	1.876
	After	39.97±4.95	30.03±3.39	2.135
	Difference	-11.37	0.63	
	P value	<0.001**	0.206	
LDL	Before	156.27±18.48	149.30±13.13	1.979
	After	130.03±5.54	160.53±18.50	11.17
	Difference	26.23	-11.23	
	P value	<0.001**	<0.001**	
VLDL	Before	45.70±9.58	44.40±10.98	1.314
	After	30.97±5.46	50.50±14.11	6.673
	Difference	14.73	-6.10	
	P value	<0.001**	<0.001**	
TG	Before	178.17±12.75	176.50±14.41	1.277
	After	157.20±6.32	180.27±15.73	6.189
	Difference	20.97	-3.77	
	P value	<0.001**	0.040*	

**Table 4:** Comparison of *Medovrudhi lakshan* before and after study in both groups studied.

Variables		Experimental Group	Control group	P Value
swedadhikya	Before	2.100±0.4026	2.100±0.4026	0.9909
	After	1.400±0.4983	2.067±0.2537	<0.001
	P value	<0.0001***	<0.7656	
Kshudhadhikya	Before	1.567±0.5040	1.600±0.5632	0.8915
	After	1.000±0.2626	1.667±0.5467	<0.001
	P value	<0.0001***	<0.4237	
Trushnadhikya	Before	2.067±0.2537	2.067±0.4498	0.97
	After	1.567±0.5040	1.933±0.2537	<0.001
	P value	<0.0003***	<0.0719	
Nidradhikya	Before	2.100±0.4026	2.033±0.4138	0.5378
	After	1.700±0.4661	2.000±0.4549	0.01
	P value	<0.0006***	<0.7768	
Kshudrashwas	Before	1.733±0.5833	1.1767±0.5040	0.8136
	After	0.9333±0.5208	1.733±0.4498	0.001
	P value	<0.0001***	<0.7728	
Dorgandya	Before	2.167±0.5921	2.267±0.4498	0.5548
	After	1.367±0.5561	2.267±0.4498	0.001
	P value	<0.0001***	<1.0000	

**DISCUSSION:**

In today's era is of evidence based medicine and we observe growing popularity to *Ayurveda* globally. The need is to provide modern parameters for everything which we study. *Dosha*, *Dhatu* and *Mala* are no exception to this.

According to many *Aacharya* '*Madhu*' is one of the best medicine for *Medodhatuvruddhi*; Specially '*Puran Madhu*'<sup>5</sup>

**Discussion on subjective criteria**

Subjective criteria to examine the individuals are *Medodhatu vruddhi lakshana*(Symptoms) mentioned by *Chrakacharya*. Main 6 symptoms selected and made gradation according to severity of *Medodhatuvruddhi*. These symptoms were *Swedadhikya*, *Kshudadhikya*, *Trushnadhikya*, *Nidradhikya*, *Kshudraswasa*, *Dorgandya*.

These values are put in statistics by applying Wilcoxon matched pairs test within the experimental and control group. It shows significant results.

**Discussion on objective criteria**

According to above results it can conclude that the external factors also affecting on BMI and WHR in *Medodhatuvruddhi* along with *Puran Madhu*. But the effect is more in comparison to without taking honey.

The 'F' value of all types of lipid profile shows conversion of homogeneity to heterogeneity between groups before and after study respectively. It means *Puran madhu* suits to maximum number of individuals in experimental group.

**CONCLUSION:**

The following conclusion found in present study.

1. After literary review of *Medodhatuvruddhi* and Obesity It can conclude that these can be correlate with each other.
2. *Puran Madhu* shows significant changes in all subjective criteria of Individuals having *Medodhatuvruddhi*.
3. *Puran Madhu* shows significant changes in all objective criterias and in Serum Cholesterol, HDL, LDL, VLDL, Triglyceride total.
4. *Puran Madhu* is also effective that increases the level of HDL which is good Cholesterol for body.
5. *Puran Madhu* Shows non significant changes when we studied *Medodhatuvruddhi* individuals according to their Weight, Body Mass Index (BMI) and Waist-Hip ratio.
6. So, it can be concluded that *Puran Madhu* is effective in Individuals having *Medodhatuvrudhi*. *Puran Madhu* therapy is very cost effective, easy to take

and effective for obesity than today's existing therapies.

Hence '*Puran Madhu*' is effective in the management of *Medodhatuvrudhi*.

**REFERENCES:**

1. Agnivesha, Charak Samhita with Sanskrit commentary, „Ayurved Dipika“ , by Chakrapanidatta and Jalpakalpataru, by Gangadhar, Tratiya khanda, Chaukhamba orientaliya Varanasi - 1, first edition, 1991.
2. Agnivesha, Charaka Samhita, with Hindi commentary, „Charaka Chandrika“, by Dr. Brahmanand Tripathi, Published by Chaukhamba Surabharati, in 1996.
3. Charak Samhita, by Priyavrata Sharma, Published by Chaukhamba Orientelia, Varanasi. Delhi.
4. Sushruta Samhita, By Kaviraj Kunajlal Bhishagratna, Publishrd by Chokhamba Sanskrit series, Varanasi.
5. Aacharya Sushruta, Sushruta Samhita, with Hindi commentary, „Ayurvedtatvasandipika“, By Kaviraj Ambikadatta Shastri, Published by Chaukhamba Surabharati, in 1996.
6. Aacharya Sushruta, Sushruta Samhita, with Sanskrit commentary, “Nibandhasangraha“, by Dalhana, edited by Yadavji Trikamaji Aacharya, Published by Chaukhamba Surabharati, in 1994
7. Aacharya Vagbhata, Ashtangahrudaya with Sanskrit commentaries „Sarvanga Sunder“, by Arunadatta and „Ayurved Rasayana“ by Hemadri, edited by Bhishgacharya Harishastri Paradakara Vaidya, Published by Chaukhamba Orientalia, 9th edition, in 2005.
8. Aacharya Vagbhata, Ashtangasangraha with Sanskrit commentary „Shashileka“ by Indu, edited by Dr. Shivprasad Sharma, Published by Chaukhamba Series, First edition, in 2006
9. Astanga Hrudayam by Prof. K. R. Shrikanta Murthy. Published by Krishnadas academy, Varanasy.
10. Astanga Hrudayam by Prof. K. R. Shrikanta Murthy. Published by Krishnadas academy, Varanasy.
11. Dhanwantari Nighantu By Acharya Priyavrata Sharma, Published by Chokhamba Varanasi, 1982
12. Raj Nighantu By Dr. Indradeva Tripathi, Published by Krushnadas Academy, Varanasi.
13. Harita, Harita Samhita Dwara Kaviraj Krishnadas Prakashana

14. Bhela, Bhela Samhita, Girija Dayalu Shukla dwara sanskarana, Chaukhamba Bharati Academy, Varanasi, Republished 1999.
15. Kashyapa, Kashyap Samhita, Vidyotini hindi Vyakhya saha dwara pandit Hemraj Sharma, Chaukhamba Sanskrit Sanstahna, Varanasi, Dasham sanskarana.
16. Prof. Purnachandra Jain and Dr. Pramod Malaviya, „Ayurvediyakriya sharir“, published by Chaukhambha Sanskrita Pratishtana, Delhi, reprinted, 2007.
17. Ranjitray Desai, Ayurvediya Kriyasharir published by Vaidyanath prakashana, Nagpur, first edition, 1953.
18. Vd. Venimadhava Shastri Joshi, Ayurved Shabdakosha“, Published by Maharashtra Rajya Sahitya Mandala, Mumbai, 1968.
19. Vaman Shivram Apte, Sanskrit Hindi kosha, Chaukhambha Vidyabhavan, Varanasi, Republish 2007.
20. Sh.Ga.Vartak, „DoshaDhatuMalaVidyanana“, Published by M.Sh.sathe, Manager the Praadnya press, wai, Satara.
21. Dr.Nandini Dilip Dhargalkar, Published by Chowkhambha Sanskrit Series Office, Varanasi, Edition Second, 2009.
22. C. Gayton, The text book of Medical Physiology, Published by Wonsier Prism book Pvt. Ltd. India, edition, in 1991.
23. Dr. C. C. Chatterjee, Human physiology, published by Medical allied agency, 11th edition, 2006. 122
24. Dr. Gerard, J. Tortora, Dr. Sandra Reynolds, Principles of Anatomy and Physiology, Harper collins College Publishers, eleventh edition,.
25. K. Sembulingam, Prema Sembulingam, Essential of Medical Physiology, published by Jaypee brothers Medical Publishers (P.) Ltd., New Delhi, fourth edition, 2006.
26. Sajit K. Chaudhuri, Concise Medical Physiology, Published by New Central Book Agency, Fourth edition, 2002.
27. Dr. Kansal D.K. Dvs. Test and measurement in sports and physical education, publications New Delhi. 1996
28. B.K. Mahajan - Methods in Biostatistics, Jaypee brother"s medical publishers, Sixth edition - 1997.
29. Ramnik Sood, Medical laboratory technology, published by Jaypee brothers, fifth Edition
30. C.L.Ghai, Text book of Practical Physiology, Published by Jaypee brothers, Seventh edition.
31. Prof. Shrikantha Murthy. Bhavaprakash of Bhavamishra, Krishnadas academy varanasy.
32. Dravaguna Vigyan , Author- Priyavrat Sharma, Published by Chokamba Vidyahavan, Varanasi, 1961.

**Cite this article as:**

Potkule Vijay R., Surse Yogesh S., Ahire Narendra R., Study The Effect of *Puran Madhu* (Old Honey) In *Medodhatu Vrudhi*(Obesity) w.s.r. to Lipid Profile, ADJIM 2017; 2(4), p. 163-168