

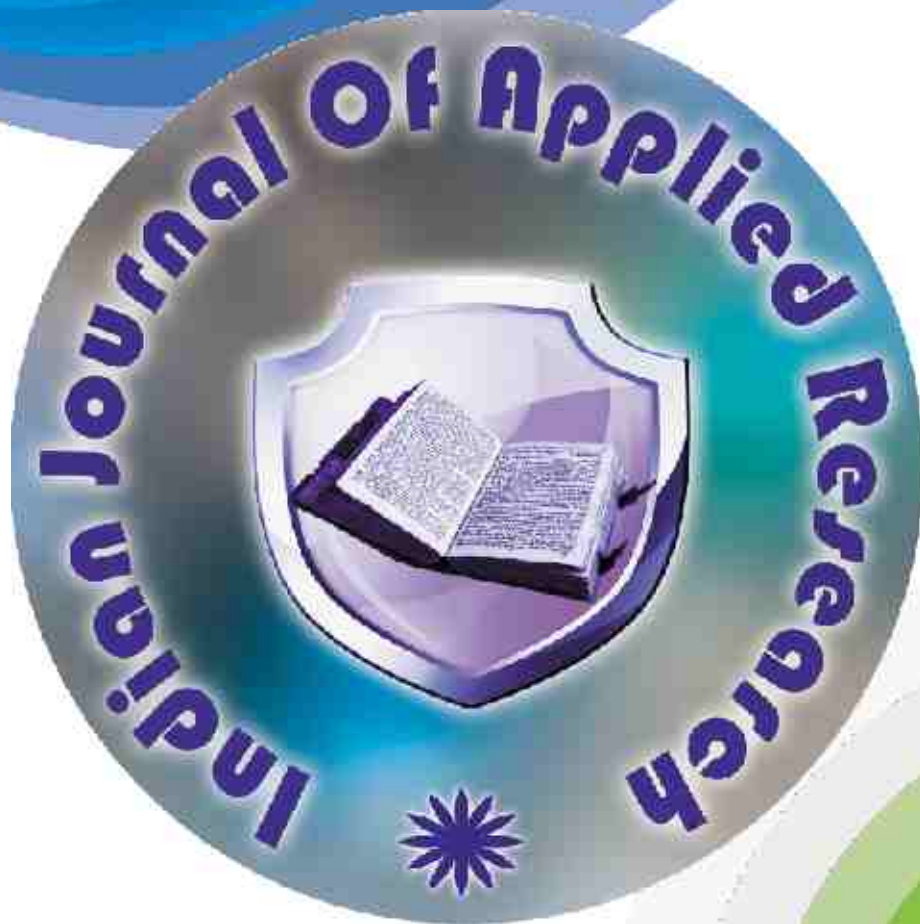
₹ 200

ISSN - 2249-555X

Volume : 1

Issue : 5

February 2012



Journal for All Subjects

www.ijar.in

Listed in International ISSN Directory, Paris.



ISSN - 2249-555X

Indian Journal of Applied Research

Journal for All Subjects

Editor-In-Chief

Dr A Kumar

Director, College Development Council (CDC)
Director, Internal Quality Assurance Cell (IQAC)
Professor in Management,
Department of Business Administration, Faculty of Management,
Bhavnagar University,

Editorial Advisory Board

Dr. S. N. Pathan
Maharashtra

Dr. SM. Ramasamy
Gandhigram

Dr. M. M. Goel
Kurukshetra

Dr. S. Ramesh
Tamil Nadu

Dr Ramesh Kumar Miryala
Nalgonda.

Dr. B. Rajasekaran
Tirunelveli

Dr. A. R. Saravankumar
Tamilnadu

Dr. Roy M. Thomas
Cochin

Dr. G. Selvakumar
Salem

Dr. Apurba Ratan Ghosh
Burdwan

Dr. Shrawan K Sharma
Uttarakhand

Dr. Sudhanshu Joshi
Uttarakhand

Prof. (Dr.) B Anandampilai
Pudhukottai

Advertisement Details

Position	B/W (Single Color)	Fore Color
Full Inside Cover	₹ 6000	₹ 12500
Full Page (Inside)	₹ 5000	-

Subscription Details

Period	Rate	Discount	Amount Payable
One Year (12 Issues)	₹ 2400	Nil	₹ 2400
Two Year (24 issues)	₹ 4800	₹ 200	₹ 4600
Three Year (36 issues)	₹ 7200	₹ 300	₹ 6900
Five Year (60 issues)	₹ 12000	₹ 600	₹ 11400

You can download the Advertisement / Subscription Form from website www.ijar.in. You will require to print the form. Please fill the form completely and send it to the **Editor, INDIAN JOURNAL OF APPLIED RESEARCH** along with the payment in the form of Demand Draft/Cheque at Par drawn in favour of **INDIAN JOURNAL OF APPLIED RESEARCH** payable at Ahmedabad.

1. Thoughts, language vision and example in published research paper are entirely of author of research paper. It is not necessary that both editor and editorial board are satisfied by the research paper. The responsibility of the matter of research paper/article is entirely of author.
2. Editing of the Indian Journal of Applied Research is processed without any remittance. The selection and publication is done after recommendations of atleast two subject expert referees.
3. In any condition if any National/International University denies accepting the research paper published in IJAR, then it is not the responsibility of Editor, Publisher and Management.
4. Only the first author is entitle to receive the copies of all co-authors
5. Before re-use of published research paper in any manner, it is compulsory to take written permission from the Editor-IJAR, unless it will be assumed as disobedience of copyright rules.
5. All the legal undertaking related to Indian Journal of Applied Research is subject to Ahmedabad Jurisdiction.
7. The research journal will be send by normal post. If the journal is not received by the author of research papers then it will not be the responsibility of the Editor and publisher. The amount for registered post should be borne by author of the research paper in case of second copy of the journal.

Editor,

Indian Journal Of Applied Research

8-A, Banans, Opp. SLU Girls College, New Congres Bhavan, Paldi,
Ahmedabad-380006, Gujarat, INDIA

Contact.: +91-9824097643 E-mail : editor@ijar.in

Index

Sr. No	Title	Author	Subject	Page. No.
1.	Assay Of Triphenylmethane Reductase Enzyme And PCR-Based Identification Of TMR Gene In Enterobacter Asbriae Strain XJUHX-4TM	Tina Mukherjee, Moumita Bhandari, Manas Das	Biotechnology	1-2
2.	An Analysis Of Growth Of Credit Card Industry	Dr. A. Vinayagamoorthy, K. Senthikumar	Commerce	3-5
3.	Impact Of Pre-Merger And Post Merger On Financial Performance (With Reference To Private Sector Banks)	Dr. Shital Vekariya	Commerce	6-8
4.	Relativity On Climate And Competencies In Human Resource Development With Reference To Neyveli Lignite Corporation Ltd,	S. Jayakumar. Dr. R. Ramachandran	Commerce	9-11
5.	Human Resource Outsourcing: A Strategy For Gaining Competitive Advantage	Dr. Santosh M. Singh	Commerce	12-13
6.	Relationship Between EVA And ROI And MVA (A Case Study Of Ten Manufacturing Industries In India)	Dr. Shivani Gupta	Commerce	14-15
7.	Modeling The Traits Of An Effective Teacher At Higher Education	Dr. Haridayal Sharma	Commerce	16-17
8.	Mahatma Gandhi National Rural Employment Guarantee Act (Mgnrega): Issues And Challenges	Dr. Mohd. Ashraf Ali, Mushtaq Ahmad	Commerce	18-20
9.	Standardisation And Grading	Viram. J. Vala, Dr. Vijay Kumar Soni	Commerce	21-22
10.	Profitability Of Selected Information Technology Companies In India	Dr. M. Jegadeeshwaran, C. Udaya	Commerce	23-25
11.	Emerging Trends In The Indian Media And Entertainment Industry	Dr Mahalaxmi Krishnan	Commerce	26-27
12.	Inventory Management Strategies And Control Techniques: An Empirical Investigation Of Small Scale Industries	Vipul Chalotra, Neetu Andotra	Commerce	28-30
13.	A Study On Performance Indicators Of Commercial Banks	Dr. G. Ganesan, P. Parthasarathy	Commerce	31-33
14.	Improved Approaches To Coreference Resolution In Machine Learning	Kuldeep Singh Raghuwanshi, Ashwini Kumar Verma	Computer Science	34-37
15.	Security Issues & Controls In Cloud Computing	V. Naga Lakshmi	Computer Science	38-40
16.	Human Development Index Of De-Notified Nomadic Castes In Maharashtra Division: A Study Of Jalna And Aurangabad Districts	Dr. Ashok Pawar	Economics	41-43
17.	Public Private Partnership In Rural & Urban Projects In India	Dr. Ashok S. Pawar, Dr. Shankar B. Ambhore	Economics	44-45
18.	Populace Insight On Development In Public Health Sector Of India Subsequent To Functioning Of National Rural Health Mission	Krishnakant Sharma	Economics	46-49
19.	Problems Of Rural Women Entrepreneurs In India: A Conceptual Overview	C. Jeyasri Usha N Devi, Dr. A. Sankaran	Economics	50-52
20.	Poverty Of Banjara And Vanjari Communities In India	Tidke Atish S., Dr. Pawar Ashok S.	Economics	53-54
21.	India And China: Economic Reforms And WTO	Dr. Surinder Kumar Singla, Dr. Kulwinder Singh	Economics	55- 56
22.	Implementing Life Skill Education Strategies In Teaching – Learning Process	R. Kalaiselvi, Dr. A. Palanisamy, Dr. A R. Saravanakumar	Education	57-59

23.	Utilisation Of Modern Technology By The Teachers In Pupil Processing Organisation	Dr. P.Paul Devanesan, Dr A. Selvan	Education	60-61
24.	Impact Of Vocational Training On Students	K.Sudha Rani, G.Umapathi, Dr. T. Ananda,	Education	62-63
25.	A Study On Emotional Intelligence Of Secondary School Teachers	Dr. Umme Kulsum, Prathima H.P.	Education	64-66
26.	The Efficiency Of Feedback Strategy Of Homework On The Development Of 10th Grade EFL Writing Skill In Al-Karak Educational Directorate	Majid Al- Khataybeh, Areej Al-Shourafa`	noitacudE	67-74
27.	Perspectives Of Stress Management In Education System	M. Meenakshisundaram, G. P. Raja, Dr. A R. Saravanakumar	Education	75-76
28.	Attention Regulation Of Meditators And Non-Meditators Of Class IX	G. Madhavi Kanakadurga, Dr. D. Vasanta Kumari,	Education	77-78
29.	Role Of Psychoeducation In Teaching – Learning Process	Dr. A R. Saravanakumar, Dr. A. Balu, Dr. S. Subbiah	Education	79-80
30.	Microcontroller Driven RGB Led System For Tristimulus Surface Colorimetry	T. N. Ghorude, A. D. Shaligram	Electronics	81-83
31.	Pmgsy And Rural Roads Development In India: Economic, Financial And Maintenance Issues	K.C. Manjunath	Engineering	84-86
32.	Routing Packets On A Chip.	Naren V Tikare	Engineering	87-89
33.	Finding The Nearest Neighbors In Biological Databases	Er. Pankaj Bhambri, Dr. O.P. Gupta, Er. Franky Goyal	Engineering	90-92
34.	Factors Affecting The Sustainability Of The Asphalt Roads: A Case Study Of Irbid Inner Ring Road, Jordan	Eng. Nasr Ahmad Dr. Mihai Iliescu	Engineering	93-94
35.	Physical And Chemical Testing Of Compounded PVC	Sapna Dabade, Dr. Dheeraj Mandloi, Deepak Khare	Engineering	95-96
36.	Impact Of Organic Farming On Yield Of Some Common Crops- A Case Study.	Namrata D. Awandekar	Environmental Science	97
37.	Hydrogeologic Settings Of The North And South Brahmaputra Plains In Upper Assam: A Comparative Study	Dr. Uttam Goswami	Geology	98-100
38.	To Study Staffing Pattern In Rajasthan Public Healthcare Delivery System.	Dr. Ashwin G. Modi, Sushman Sharma	Healthcare	101-105
39.	Work And Health: A Situational Analysis Of Factory Workers	Dr. S. S. Vijayanchali, Dr. E. Arumuga Gandhi	Home Science	106-108
40.	Performance Of Camel Kid Hair: Acrylic Blended Yarn And Knitted Fabric	Suman Pant, Anjali Sharma	Home Science	109-110
41.	Impact Of Holistic Nutrition Education Package On Diabetes Mellitus Control In Middle Aged Women	Dr. Anjali Rajwade	Home Science	111-112
42.	Assessment Of Relationship Between Ida And Personal Hygiene, Nutritional Knowledge And Dietary Practices In Adolescent Girls	Dr. Anjali Rajwade	Home Science	113-114
43.	Employee Attrition And Retention In Private Insurance Sector– A HRM Challenge	Dr. J. Senthil Vel Murugan, S.Bala Murugan	Human Resource Management	115-117
44.	A Study On Impact Of Unionism On Industrial Relations In Manufacturing Sector	Jaya Ahuja	Industrial Relations	118-120

45.	Augmentation Of India's Foreign Exchange Reserve: An Analysis	Dr.S P.Mathiraj, Ar.Annadurai	International Business	121-123
46.	Films – A Techno Literary Art Form	Dr. Dipti Mehta	Literature	124-125
47.	Indirect Models Of Reading To Develop Descriptive Writing	Dr. K. Madhavi	Literature	126-128
48.	Ramkrishna Mishra Ke Upanaso Me Rajnetaik Chetavni	Dr. Sanjay Rathod, Dilip Jhadav	Literature	129
49.	Hindi Kavita Me Nari Jivan Ka Badla Swarup	Dr. Sanjay Rathod	Literature	130
50.	Impact Of IPL Sponsorship On Consumer Buying Behavior With Reference To Nagpur City	Chandrima Das	Management	131-135
51.	Crowd Sourcing –A New Management Mantra	Devi Premnath, Dr. C. Nateson	Management	136-137
52.	Small Scale Industries In India: An Evaluation Of Productivity In The Post-Liberalized Scenario	Dr. Gaurav Lodha,	Management	138-139
53.	Comparative Analysis Of Milk Products With Respect To Its Competitors With Special Reference To Karnataka Milk Federation (KMF) – At Dharwada City, Karnataka, India	Dr. N. Ramanjaneyalu	Management	140-143
54.	A Study On Work Stress In Women Employees In Coimbatore District	R. Maheswari, N. Brindha	Management	144-145
55.	Accounting For Carbon Credits	Dr. Gaurav Lodha	Management	146-148
56.	A Literature Review On The Relationship Between Training (As A Core Responsibility Of HRM) And Firm Performance.	Priya Sharma, Dr. S. L. Gupta	Management	149-152
57.	A Study On Agricultural Marketing Practices And Constraints With Special Reference To Paddy / Rice.	CM Maran, Dr Raja Pranmalai	Management	153-156
58.	Performance Of Share Price Of Indian Public Sector Banks And Private Sector Banks - Comparative Study	V. Prabakaran, D. Lakshmi Prabha	Management	157-158
59.	Intuitionistic Fuzzy Primary And Semiprimary Ideal	Dr. M.Palanivelrajan, S.Nandakumar	Mathematics	159-160
60.	Significance Of Umbilical Artery Velocimetry In Perinatal Outcome Of Fetuses With Intrauterine Growth Retardation.	Dr G S Shekhawat	Medical Science	161-163
61.	Large Adult Sacrococcygeal Teratoma: A Case Report And Review Of Literature.	Dr.Yavalkar Pa, Dr. Naik Am.	Medical Science	164-165
62.	Epidural Steroid In Low Back Ache	Dr. B. L. Khajotia, Dr. Neelam Meena	Medical Science	166-167
63.	A Comparative Study Of Second Trimester MTP With Use Of Vaginal Misoprostol And Extra Amniotic Instillation Of Ethacridine Lactate.	Dr. Ketaki Junnare, Dr. Sameer Darawade, Dr. Priyamvada Shah, Dr. Swati Mali.	Medical Science	168-169
64.	A Novel Surgical Approach For Treatment Of Sui –TVT Obturator Tape	Dr. Ketaki Junnare, Dr. Durga Karne, Dr Neelesh Risbud.	Medical Science	170-171
65.	Advantage Of Fallopian Tube Sperm Perfusion Over Intra-Uterine Insemination When Used In Combination With Ovarian Stimulation For The Treatment Of Unexplained Infertility.	Dr G S Shekhawat, Dr Pushpalata Naphade	Medical Science	172-175

66.	"Bilateral Sertoli-Leydig Cell Tumor In Postmenopausal Female" A Case Report	Dr. Priyamvada Shah, Dr. Ketakijunnare, Dr. DurgaKarne	Medical Science	176-178
67.	Pretreatment With Ephedrine For Prevention Of Pain Associated With Propofol Injection.	Dr. Kavita U Adate, Dr. Jyoti A. Solanki	Medical Science	179-181
68.	Does The Structured Teaching Programme Influence The Knowledge About Physical Wellbeing Of School Children? A Quasi Experimental Study.	Dr. S. Valliammal, Dr. Ramachandra, Raja Sudhakar	Nursing	182-184
69.	An Approach For Information Retrieval For Bookstores Using Formal Ontology	Sumit Jain, C.S.Bhatia	Ontology	185-187
70.	Analgesic Activity Of Anacardium Occidentale	A. Devadoss, C. Aparna, K. Parimala, D. Sukumar	Organic Chemistry	188-190
71.	Behaviourism : Science Or Metaphysics	Dr. Jatinder Kumar Sharma	Philosophy	191-193
72.	Multi-Dimensional Perspectives Of Obesity And Its Management	S. Dhanaraj, Dr. A. Palanisamy	Physical Education	194-196
73.	Refractive Index, Density, Excess Molar Volume, Excess Molar Refraction For Liquid Mixtures (Ethyl Ethanoate + Benzene Derivatives) At Different Temperatures	Sheeraz Akbar, Mahendra Kumar	Physics	197-199
74.	Refractive Indices, Densities And Excess Properties For Liquid Mixtures (Cetane + Alkanols) At Different Temperatures	Sheeraz Akbar, Mahendra Kumar	Physics	200-202
75.	Capacity Building For Effective Local Governance: Indian Perspectives	Dr. Pralhad Chengte	Political Science	203-205
76.	Psychological Well-Being: A Study Of Non-Institutionalized Aged	Dr. Pankaj S. Suvera	Psychology	206-208
77.	Women Empowerment Through N R E G S (With Reference To State Of West Bengal)	Dilip Kumar Karak	Social Sciences	209-211
78.	Effect Of Selected Yogic, Aerobic And Laughter Exercises On Blood Pressure Of High School Boys	Dr.Manjappa.P, Dr.Shivarama Reddy. M	Sports	212-216
79.	Association Study Between Lead And Copper Accumulation At Different Physiological Systems Of Goat By Application Of Canonical Correlation And Canonical Correspondence Analyses	Partha Karmakar, Debasis Mazumdar, Seema Sarkar (Mondal), Sougata Karmakar	Statistics	217-219
80.	Development Of Silver -Silica Nanocomposite For Novel Humidity Sensing Application	Surender Duhan	Technology	220-221



Multi-dimensional Perspectives Of Obesity And Its Management

* Mr.S. Dhanaraj **Dr. A. Palanisamy

* Assistant Professor, Alagappa University College of Physical Education, Karaikudi, Tamil Nadu

** Assistant Professor, Alagappa University College of Physical Education, Karaikudi, Tamil Nadu

ABSTRACT

Today millions of people of all age group across the globe facing the health hazard of obesity. Obesity makes like lazy and sedentary. Body becomes weak it decreases the possibilities of longer life span. Various health organizations recommend that physicians assess their patients for overweight and that patients receive appropriate counseling about safe weight management and the benefits of physical activity and a healthy diet.

Keywords : Obesity, management, symptoms, index formula and heredity

Introduction

Obesity is an excess proportion of total body fat. A person is considered obese when his or her weight is 20% or more above normal weight. The first symptom of obesity is increase in weight, body loses its shape, due to accumulation of fats in various parts of body, sometimes body balance is affected. The obese person has to spend extra energy for any movement which result in reduction in overall. This reduction in overall activity further increases the weight, also the enthusiasm in any work goes down (Palanisamy, 2008). The increase in weight is a gradual process. The weight doesn't increase suddenly. We may overlook this, as this increase is not noticeable initially but beyond certain limits this overweight may become reason for various diseases like Hypertension, Diabetes, Heart problems. So we need to control the weight from the beginning.

Symptoms of Obesity

- Obesity increases weight, reduces physical movements and also brings slowness in emotional and mental activities.
- Food intake increases
- Obesity can result in frustration.
- Laziness increases, reducing overall efficiency.
- Sometimes obesity can create obstruction to breathing process.
- Obesity is also a cause for impotency.

Types of obesity

There are three types

- Android (Aple shaped)
- Gynoid (Pear Shaped)
- Third Type (barrel shaped)

Android (Apple shaped) in the male "Type " of obesity where excess fat is marked in upper half of the body. Android type of obesity is likened to the shape of an apple. The shoulders, face, arms, neck, chest ad upper portion of the abdomen are bloated. The stomach gives a stiff appearance, and also the arms, shoulders & breast. The back seems to be erect but the neck is compressed and there will be protruding chest because of the bulk in the stomach. The lower portion of the

body, the hips, thighs and the legs are thinner beyond proportion in comparison with the upper part. In these persons the vital organs affected will be mostly the heart, liver, kidneys & lungs. Though this type of obesity is found more in males it is common in females too. Android type of obesity is a major risk for heart damage ad heart disease due to high cholesterol.

Gynoid (Pear shaped) in this type the lower part of the body has the extra flesh. thighs type of obesity is also common to both sexes though females are more affected. Gynoid type of obesity is similar to pears. The flesh is somewhat flabby in the abdomen, thighs, buttocks & legs. The face and neck mostly give a normal appearance. In some persons, the cheeks may to drawn too. As these persons grow old the whole figure assumes a shaping posture and the spine is never erect due to the heavy hips and thighs. This vital organs affected mostly are the kidneys, uterus, intestines, bladder and bowels. But the functions of these organs sometimes have a direct effect on the heart.

Barrel shaped: Besides android and gynoid, there is one more type of obesity. Some people do not belong to any of the above type of obesity. Their whole body from head to toe looks like a barrel. Their gait is more to rolling rather than walking. The fat tissues in their body hinder the movement of all the internal organs and consequently affect their brisk functioning. For them any exercise is difficult due to the enormous size of the body.

Calculation of obesity

Body mass index = weight in kg. / (Height in meter²)

If the BMI is in between 19 to 25, it is considered a normal. But if it is more than 25, then it can be called as overweight, and if it is above 30, then it can be called as Obesity.

Sl.No	BMI	Weight
1	Below 18.5	Under weight
2	18.5 – 24.9	Normal
3	25-29.9	Over weight
4	30-35	Obese
5	35 above	Over obese

B.M.I Chart

Height in cm	BMI													
	19	20	21	22	23	(24)	25	26	27	28	29	30	35	40
148	41.6	43.8	46.0	48.2	50.4	52.6	54.8	57	59.1	61.2	63.5	65.7	76.7	87.6
150	42.8	45.0	47.3	49.5	51.8	54.0	56.3	58.5	60.8	63.0	65.3	67.5	78.8	90.0
152	43.9	46.2	48.5	50.8	53.1	55.4	57.8	60.1	62.4	64.7	67.0	69.3	80.9	92.4
154	45.1	47.4	49.8	52.2	54.5	56.9	59.3	61.7	64.0	66.4	68.8	71.1	83.0	94.9
156	46.2	48.7	51.1	53.5	56.0	58.4	60.8	63.3	65.7	67.1	70.6	73.0	85.2	97.3
158	47.4	49.9	52.4	54.9	57.4	59.9	63.4	64.9	67.4	69.9	72.4	74.9	87.4	89.9
16	48.6	51.2	53.8	56.3	58.9	61.4	64.0	66.6	69.1	71.7	74.2	76.8	89.6	102.4
162	49.9	52.5	55.1	57.7	60.4	63.0	65.6	68.2	70.9	73.5	76.1	78.7	91.9	105.0
164	51.1	53.8	56.5	59.2	61.9	64.6	67.2	69.9	72.6	75.3	78.0	80.7	94.1	107.6
166	52.4	55.1	57.9	60.6	63.4	66.1	68.9	71.6	74.4	77.2	79.9	82.7	96.4	110.2
(168)	53.6	56.4	59.3	62.1	64.9	67.7	70.6	73.4	76.2	79.0	81.8	84.7	98.8	112.9
170	54.9	57.8	60.7	63.6	66.5	69.4	72.3	75.1	78.8	80.9	83.8	86.7	101.2	115.6
172	56.2	59.2	62.1	65.1	68.0	71.0	74.0	76.9	79.9	82.8	85.8	88.8	103.5	118.3
174	57.5	60.0	63.0	66.0	69.0	72.0	75.0	78.0	81.0	84.0	87.0	90.0	106.0	121.1
176	58.9	62.0	65.0	68.1	71.2	74.3	77.4	80.5	83.6	86.7	89.8	92.9	108.4	123.9
178	60.2	63.4	66.5	69.7	72.9	76.0	79.2	82.4	85.5	88.7	91.9	95.1	110.9	126.7
180	61.6	64.8	68.0	71.3	74.5	77.8	81.0	84.2	87.5	90.7	94.0	97.2	113.4	129.6
	WEIGHT													

Body mass index formula

If you are unable to use the BMI calculation, or if you are interested in how BMI is calculated, this page has the mathematical formulas. You can calculate BMI using feet, inches, and pounds, or meters, centimeters and kilograms.

English formula

Body mass index can be calculated using pounds and inches with this equation.

$$BMI = \frac{\text{(Weight in Pounds)} \times 703}{\text{(Height in inches)} \times \text{(height in inches)}}$$

For example, a person who weighs 220 pounds and is 6 feet 3 inches tall has a BMI of 27.5.

$$\frac{220 \text{ lbs.}}{(75 \text{ inches}) \times (75 \text{ inches})} \times 703 = 27.5$$

Metric formula

Body mass index can also be calculated using kilograms and meters (or centimeters)

$$BMI = \frac{\text{(Weight in Kilograms)}}{\text{(Height in Meters)} \times \text{(height in Meters)}}$$

or

$$BMI = \frac{\text{(Weight in Kilograms)}}{\text{(Height in Centimeters)} \times \text{(height in centimeters)}}$$

For example, a person who weighs 99.79 kilograms and is 1.905 meters (190.50 centimeters) tall has a BMI of 27.5.

$$\frac{99.79 \text{ Kg}}{(1.905\text{m}) \times (1.905 \text{ m})} = 27.5$$

Normal desirable Weights of Men & Women

Height (cm)	Desirable weights (kilograms) Women			Desirable weights (kilograms) Men			
	Small Frame	Medium Frame	Large Frame	Height (cm)	Small Frame	Medium Frame	Large Frame
157.5	50.7-54.4	53.5-57.1	57.1-63.9	147.5	41.7-44.4	43.5-48.5	47.1-53.9
160	52.1-55.8	54.8-60.3	58.5-55.3	150	42.6-45.8	44.4-49.9	48.0-55.3
162.5	53.5-57.1	56.2-61.6	59.8-67.1	152.5	43.5-47.1	45.8-51.2	49.4-56.7
165	45.8-58.5	57.8-63.0	61.2-68.9	155	44.9-48.5	47.1-52.6	50.8-58.0
167.5	56.2-60.3	59.0-64.8	62.6-70.0	157.5	46.2-49.9	48.5-53.9	52.1-59.4
170	58.0-62.1	60.7-66.6	64.4-73.0	160	47.6-51.3	49.9-55.3	53.5-60.7
172.5	59.8-63.9	62.6-69.9	66.6-75.2	162.5	49.0-52.6	51.2-57.1	54.9-62.6
175	61.6-65.7	64.6-70.7	68.4-77.1	165	50.3-53.9	52.6-58.9	56.7-64.4
178	63.4-68.0	66.6-72.5	70.3-78.9	167.5	51.6-55.8	54.4-61.2	58.5-66.2
180	65.3-69.8	68.0-74.8	72.1-81.1	170	53.5-57.6	56.2-63.0	60.3-68.0
183	67.1-71.6	69.8-77.1	75.3-83.4	172.5	54.8-59.4	58.0-64.8	62.1-69.0
185.5	68.9-73.4	71.6-79.3	76.1-85.7	175	57.1-61.2	59.8-66.6	63.9-71.6
188	70.7-75.7	73.4-81.6	78.4-87.9	178	58.9-63.5	61.6-68.4	65.7-73.9
190.5	72.5-77.5	75.7-83.9	80.7-90.2	180	60.7-65.3	63.5-70.3	67.5-76.2
193	74.3-79.3	78.0-86.1	82.5-92.5	183	62.6-67.1	65.3-72.1	69.4-78.4

General causes for obesity

a) Obesity due to food habits

- Overeating is the prime factor in obesity
- Any excess of ingested calories over energy expenditure is stored as fat. Obesity is like a bank account.
- If a person takes in 2500 calories daily and his calorie output is 2300, then he saves 200 calories which are stored as

fat.'

- An extra slice of bread or a banana provides 50, 100 calories and such slight excess amounts to a considerable accumulation in the course of time.

- Obesity does not depend upon the quantity of food eaten but on its calorie equivalent.

- Cucumber provides 16 calories per 100 g, but the same weight of roasted groundnuts (peanuts) is equivalent to 600 calories

- Usually an obese person solemnly declares that he eats very little, which may be true if his diet consists mainly of butter, bread, cheese and sweets.

b) Obesity due to physical problems

i. Obesity can be hereditary

- Pituitary, Puberty adiposity, Climacteric in both females and males, Pregnancy

- Hypothyroidism, Polycystic Ovarian Diseases (PCOD)

- Digestive disorder may result in obesity

- Problems in the nervous systems.

c) Obesity due to psychological factors

- Emotions disturbances

- Depression & anxiety

- Frustration & loneliness

d) Sedentary habits

- Sitting & watching TV, movies, working on computer for long hours.

- Consuming cold food all the time.

- Cars dominate our life & few people do not walk or ride bike to go somewhere.

- As life becomes busier people spend lesser time to cook healthy meals & goes to restaurant, fast food places which has got lot of calories than food prepared from fresh foods at home.

e) Hormones

- Dysfunction of thyroid, pituitary or suprarenals may result in obesity.

- The female sex hormones also play a role as obesity may occur after pregnancy, after removal of ovaries or uterus or at menopause.

f) Heredity

- The role of heredity in obesity is not well understood

- It is possible that abnormal genes may be responsible for excessive hunger or an imbalance the endocrine glands or a tendency to deposit fat.

Important key to avoid obesity

- Regular exercise. Try to exercise 30-60 minutes every day but exercise doesn't have to be a hard core.

- Walking, Swimming are all good ways to burn your calories and helps you stay fit. Try these activities to get moving.

- Go out for a walk

- Take the stairs instead of elevators (or) lift.

- Walk instead of riding a bike to places such as schools, friends and neighbors house.

- If you have to drive somewhere, park your vehicle farther away then walk over to some distance.

- Tackle those household chores like vacuuming, washing the car or cleaning the bathrooms to burn your calories.

- Alternate your activities so that you don't get bored. Try for running, jogging, skating and the possibilities are endless.

- Visit the neighbors in person instead of making, a phone call.

- While taking bath avoid the habit of bathing by standing under the shower, bend and take the mug of water from bucket for bathing. If possible take massage & steam bath regularly.

- Limit your time in watching TV or playing video games, reading books.

- Go out for dancing it can burn more than 300 calories an hour.
- Don't sleep for more than 6-7 hours.
- Try to stop addictions such as smoking, drinking alcohol or any other drugs.
- Walk the "long way" instead of "short cut".

Conclusion

For many overweight and obese patients, achieving and maintaining a healthy weight is a difficult, often life-long challenge. Despite considerable public interest and economic investment in weight loss and weight control programmes, without a long-term commitment to life style change, most adults regain any weight loss within five years. To benefit from a weight loss programme, patients must be motivated to lose weight, must have access to an effective method of reducing weight and must maintain the resulting weight loss. Physicians have an important role in helping patients prevent the development of obesity by alerting them to the risks of

inappropriate weight gain and advocating life styles that promote a healthier weight. To maintain a healthy weight, good dietary habits must be coupled with increasing physical activity, and these must become permanent life style changes.

REFERENCES

International institute for population, science (IIPS) and Macro international, National Family Health Survey (NFHS 3), 2005-06, India volume I, Mumbai IIPS, 2007. | Chambers JC, Elliott P, Zabanesh, D.Zhang W, Li Y, Forguel P, Balding D, Scott J, Kooner JS, Common Genetic variation near MC4R is associated with waist circumference and insulin resistance, *Net Genet*, 2008, Jun; 40 (6): 716-8 Epub 2008 May. | Medical Encyclopaedia, Medline Plus, US National Library fo Medicine and National Institute of Health, 2011. | Clarke J.H. The prescriber. | Dr. A. Palanisamy Sports Nutrition, Bharathi and Bharathi Publisher Thiruchengode, 2009. | Obesity: Preventing and Managing the global epidemic, Report of a WHO Consultation on Obesity, Geneva, WHO, 1997.



Sara Publishing Academy
Indian Journal Of Applied Research
Journal for All Subjects



Editor,
Indian Journal Of Applied Research
8-A, Banans, Opp. SLU Girls College,
New Congres Bhavan, Paldi, Ahmedabad-380006.
Contact.: +91-9824097643 E-mail : editor@ijar.in

Printed at Unique Offset, Novatsing Rupam Estate, Opp. Abhay Estate, Tavdipura, Shahibaug, Ahmedabad