# DEVI AHIL YA VISHWAVID YALAYA, INDORE

# SCHOOL OF PHYSICAL EDUCATION

### University Grants Commission Special Assistance Programme DRS-I



#### **RESEARCH PROJECT REPORT**

"A Project on Health Related Parameters of Students and Faculty of Devi Ahilya Vishwavidyalaya, Indore" (2016-21)

Submitted by

Coordinator UGC SAP DRS-I Deputy Coordinator UGC SAP DRS-I

#### **Title of Project:**

# A Project on Health Related Parameters of Students and Faculty of Devi Ahilya Vishwavidyalaya, Indore

#### **Introduction:**

The UGC special assistance programme (SAP) is intended through constant efforts to raise the quality of teaching / research in different disciplines/subjects carefully selected on the basis of their work, academic achievements and viable potential for further development. The essence and primary aim of this scheme is combination of teaching and research, to encourage group research efforts in pursuit of excellence.

Under the banner of SAP DRS-I and vide circular of UGC 14-24/2016(CPP III) dated 10.11.2016, School of Physical Education initiated the health status survey of University students and teachers.

Health being the single most important issue hence special consideration on health has to be taken in priority of the educational institutions.

A survey in this regard is being started with the objectives of assessing the health related parameters and to achieve the optimum health for students through training after the assessment of the parameters.

#### **Objectives:**

- To identify the health status of university students in BMI, FAT PERCENTAGE, VISCERAL FAT and LUNG CAPACITY parameters.
- 2. To provide remedial measures to ensure optimum health through the specific training programme.

### **Methodology:**

The University has thirty two University Teaching Departments imparting education in frontline areas of Physical Education, Computers, IT, Engineering, Life Sciences, Social Sciences, Education and Management etc.

Data for different parameters of health is being collected from the students and faculty of these departments in the university campus using standardized tools for the purpose and the total data of 4158 male and female was collected.

### **Tools for Data Collection**

Standardized tools and equipments is being used for the data collection-

#### **Body Composition Machine**

 For data collection of Body Mass Index, Body Fat Percentage, Body Age, Visceral Fat, Resting Metabolism Rate etc.

#### Stadio-meter

• For data collection of Body Mass Index etc.

#### **Digital Spiro-meter**

• For data collection to measure pulmonary function (different respiratory volumes: FVC, TV, IRV, RV, Live Graph etc.)

#### **Findings**

The findings with regard to the data collected till March 2019 have been presented in two sections-

- Body Mass Index Number and Percentage of Male and Female.
- 2. Body Fat Percentage Number and Percentage of Male and Female.

# **BODY MASS INDEX (BMI)**

#### **Body Mass Index Classification**

Body Mass Index Value		Classification	
Male Female		Classification	
Less than 18.5		Under Weight	
18.5 to 24.9		Normal	
25 to 29.9		Over Weight	
30 & Above		Obese	

TOTAL NO. OF DATA COLLECTED - 4158 NO. OF MALE - 3183 NO. OF FEMALE – 975

#### UNIVERSITY MALE AND FEMALE BMI AVERAGE

TOTAL NO. OF DATA COLLECTED - 4158 NO. OF MALE - 3183 NO. OF FEMALE - 975



### **UNIVERSITY FEMALE BMI STATUS**

#### TOTAL NO. OF DATA COLLECTED FROM FEMALE – 975

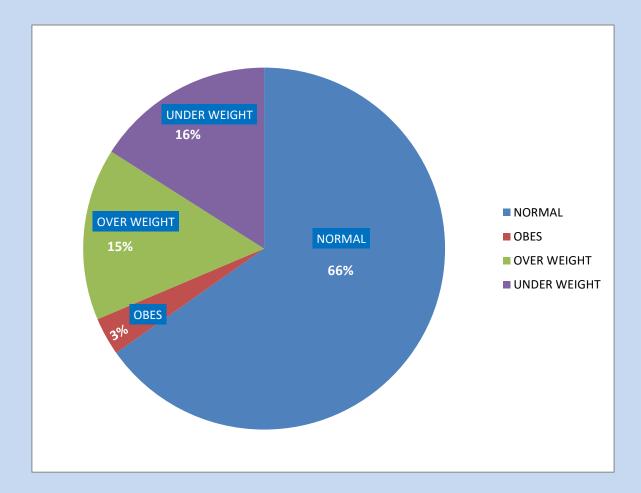
Status of Health according to BMI value	No. of Female
NORMAL	636
OBES	33
OVER WEIGHT	150
UNDER WEIGHT	156



### UNIVERSITY FEMALE BMI STATUS PERCENTAGE

TOTAL NO. OF DATA COLLECTED FROM FEMALE – 975
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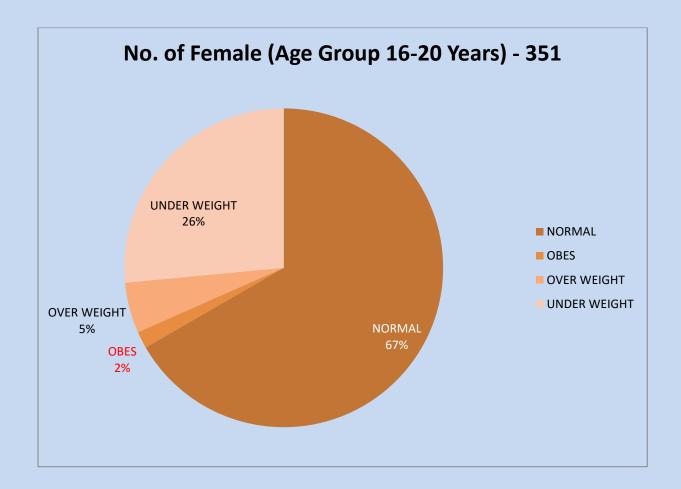
Status of Health according to BMI value	No. of Female	Percentage
NORMAL	636	66%
OBES	33	3%
OVER WEIGHT	150	15%
UNDER WEIGHT	156	16%



## Age Group – 16 to 20 Years

#### TOTAL NO. OF DATA COLLECTED FROM FEMALE OF AGE GROUP 16-20 YEARS 351

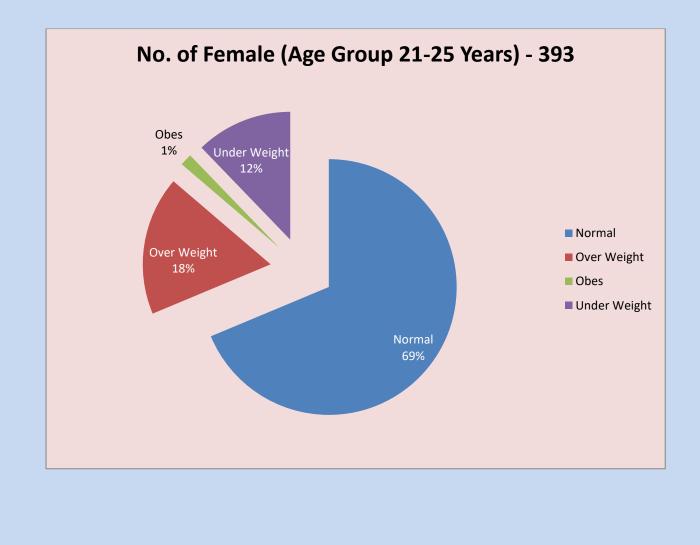
Status of Health according to BMI value	No. of Female	Percentage
NORMAL	234	67%
OBES	6	2%
OVER WEIGHT	18	5%
UNDER WEIGHT	93	26%



# Age Group – 21 to 25 Years

#### TOTAL NO. OF DATA COLLECTED FROM FEMALE OF AGE GROUP 21-25 YEARS 393

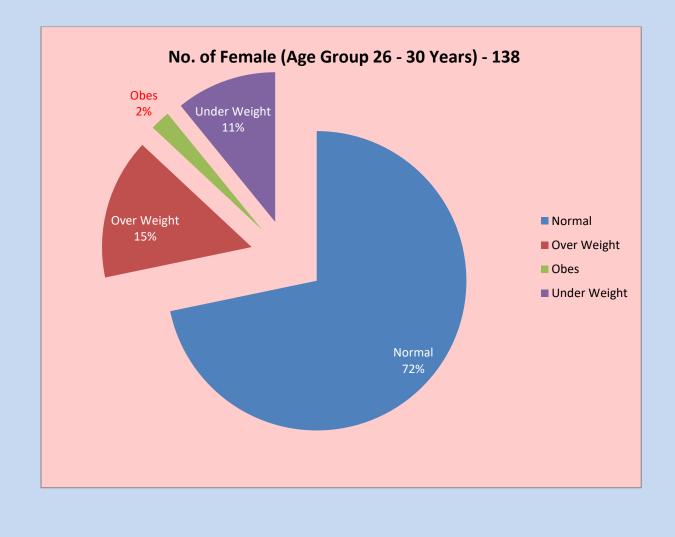
Status of Health according to BMI value	No. of Female	Percentage
NORMAL	270	69%
OBES	6	2%
OVER WEIGHT	69	17%
UNDER WEIGHT	93	12%



Age Group – 26 to 30 Years

# TOTAL NO. OF DATA COLLECTED FROM FEMALE OF AGE GROUP 26-30 YEARS 138

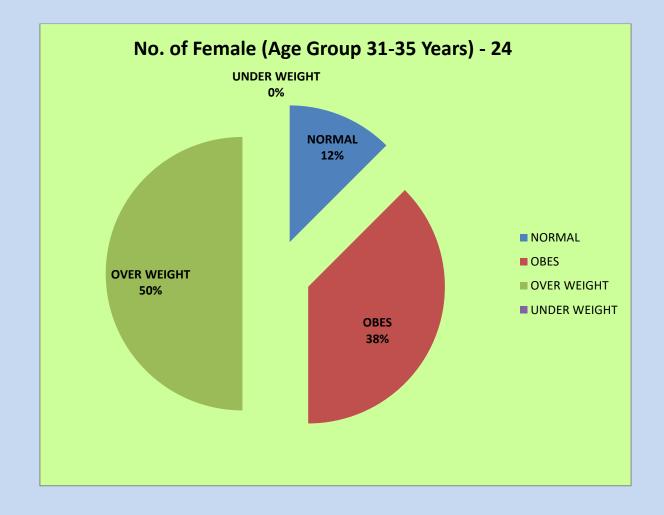
Status of Health according to BMI value	No. of Female	Percentage
NORMAL	99	72%
OBES	3	2%
OVER WEIGHT	21	15%
UNDER WEIGHT	15	11%



Age Group – 31 to 35 Years

# TOTAL NO. OF DATA COLLECTED FROM FEMALE OF AGE GROUP 31-35 YEARS 24

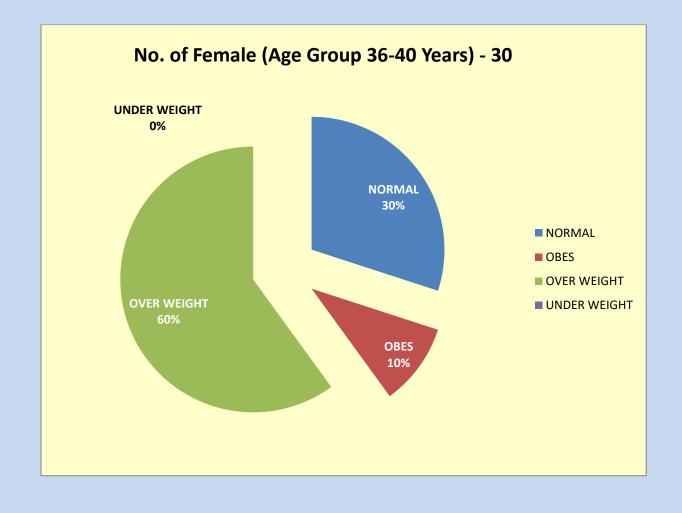
Status of Health according to BMI value	No. of Female	Percentage
NORMAL	3	12%
OBES	9	38%
OVER WEIGHT	12	50%
UNDER WEIGHT	0	0%



## Age Group – 36 to 40 Years

#### TOTAL NO. OF DATA COLLECTED FROM FEMALE OF AGE GROUP 36-40 YEARS 30

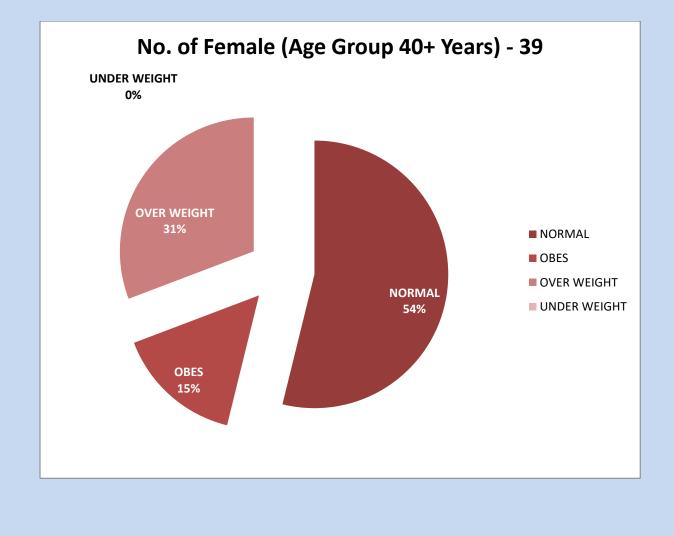
Status of Health according to BMI value	No. of Female	Percentage
NORMAL	9	30%
OBES	3	10%
OVER WEIGHT	18	60%
UNDER WEIGHT	0	0%



### Age Group – 40+ Years

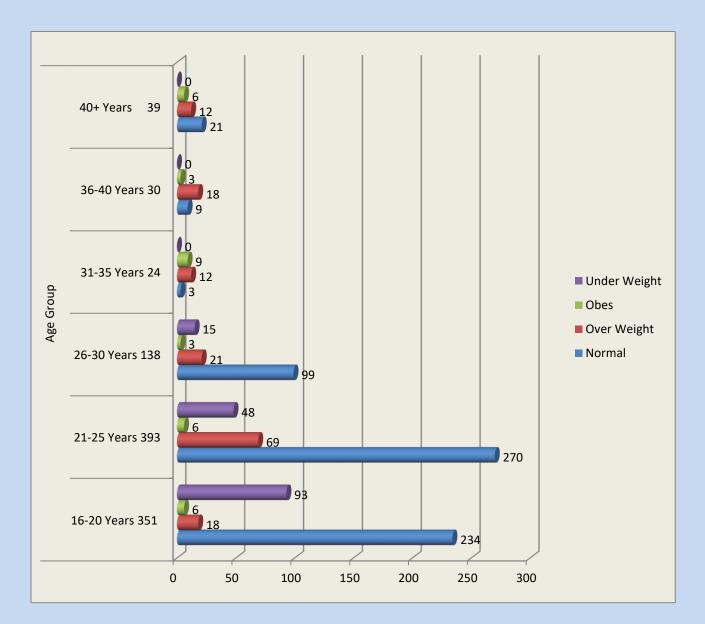
TOTAL NO. OF DATA COLLECTED FROM FEMALE OF AGE GROUP 36-40 YEARS 39

Status of Health according to BMI value	No. of Female	Percentage
NORMAL	21	54%
OBES	6	15%
OVER WEIGHT	12	31%
UNDER WEIGHT	0	0%



#### TOTAL NO. OF DATA COLLECTED FROM FEMALE – 975

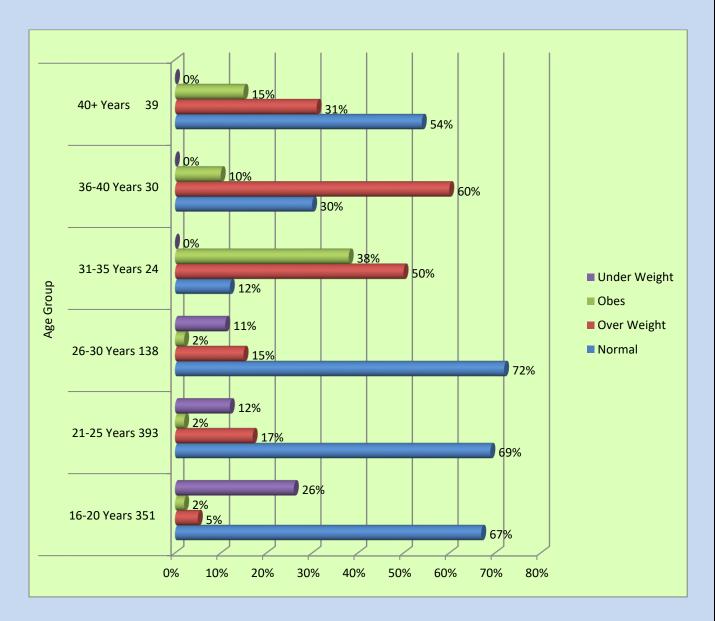
		Normal	Over Weight	Obese	Under Weight
	16-20 Years 351	234	18	6	93
	21-25 Years 393	270	69	6	48
Age Group	26-30 Years 138	99	21	3	15
	31-35 Years 24	3	12	9	0
3	36-40 Years 30	9	18	3	0
	40+ Years 39	21	12	6	0



# **OVERALL UNIVERSITY FEMALE BMI PERCENTAGE** ACCORDING TO THEIR AGE

		Normal	Over Weight	Obese	Under Weight
	16-20 Years 351	67%	5%	2%	26%
Ago Group	21-25 Years 393	69%	17%	2%	12%
Age Group	26-30 Years 138	72%	15%	2%	11%
	31-35 Years 24	12%	50%	38%	0%
	36-40 Years 30	30%	60%	10%	0%
	40+ Years 39	54%	31%	15%	0%

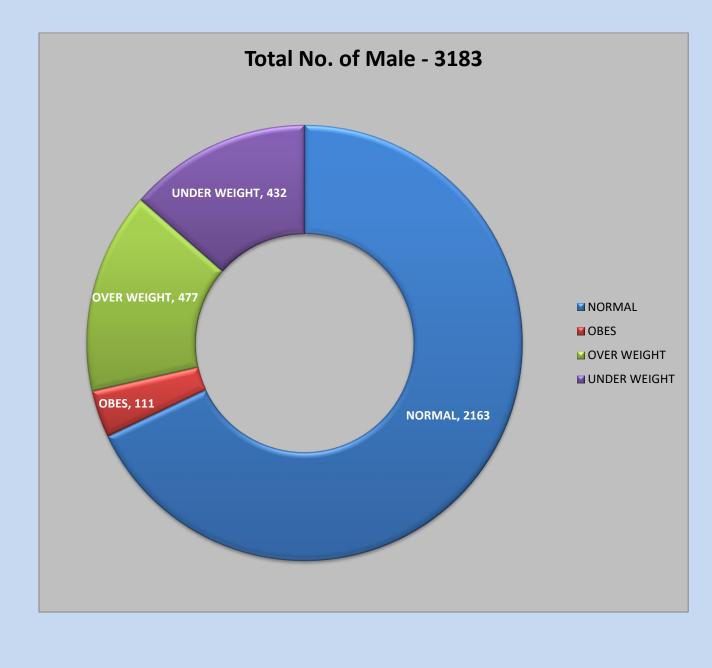
#### TOTAL NO. OF DATA COLLECTED FROM FEMALE – 975



# **UNIVERSITY MALE BMI STATUS**

#### TOTAL NO. OF DATA COLLECTED FROM MALE – 3183

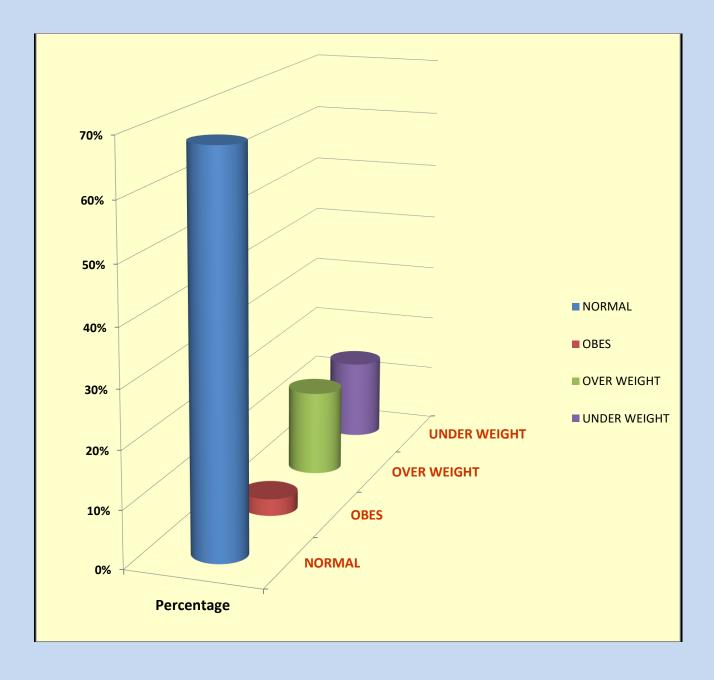
Status of Health according to BMI value	No. of Male
NORMAL	2163
OBES	111
OVER WEIGHT	477
UNDER WEIGHT	432



### **UNIVERSITY MALE BMI STATUS PERCENTAGE**

#### TOTAL NO. OF DATA COLLECTED FROM MALE – 3183

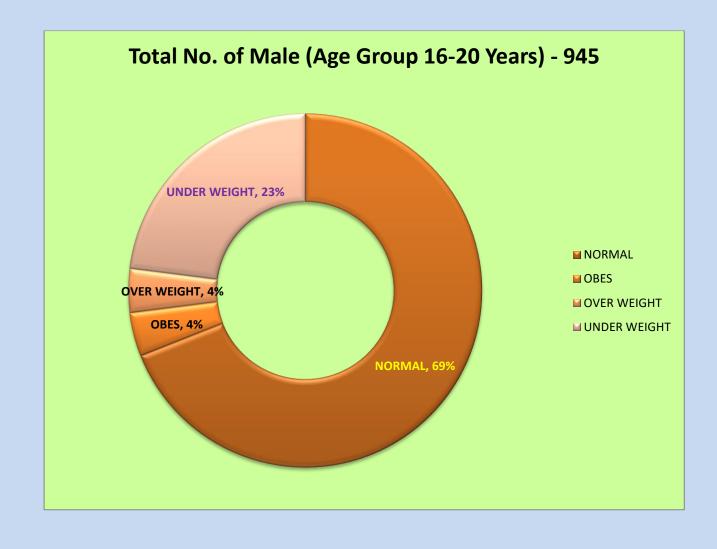
Status of Health according to BMI value	No. of Male	Percentage
NORMAL	2163	68%
OBES	111	3%
OVER WEIGHT	477	15%
UNDER WEIGHT	432	14%



# Age Group – 16 to 20 Years

#### TOTAL NO. OF DATA COLLECTED FROM MALE OF AGE GROUP 16-20 YEARS 945

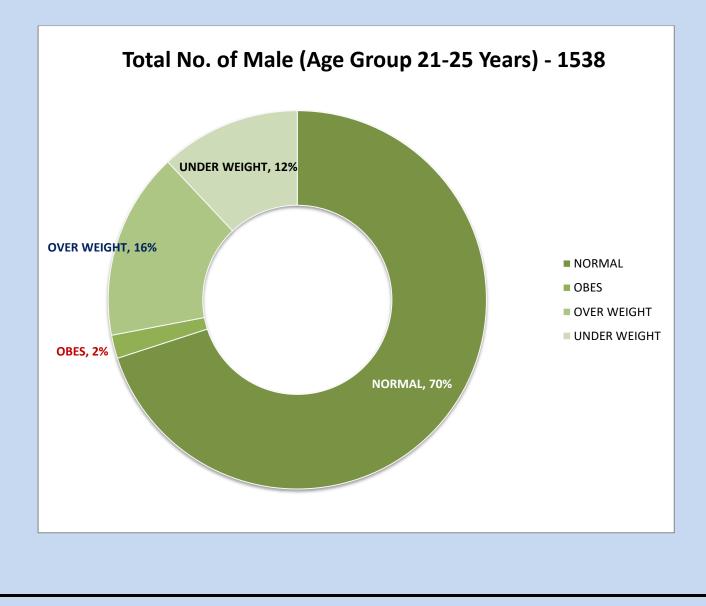
Status of Health according to BMI value	No. of Male	Percentage
NORMAL	654	69%
OBES	42	4%
OVER WEIGHT	36	4%
UNDER WEIGHT	213	23%



# Age Group – 21 to 25 Years

# TOTAL NO. OF DATA COLLECTED FROM MALE OF AGE GROUP 21-25 YEARS 1538

Status of Health according to BMI value	No. of Male	Percentage
NORMAL	1077	70%
OBES	27	2%
OVER WEIGHT	248	16%
UNDER WEIGHT	186	12%



## Age Group – 26 to 30 Years

# TOTAL NO. OF DATA COLLECTED FROM MALE OF AGE GROUP 26-30 YEARS 420

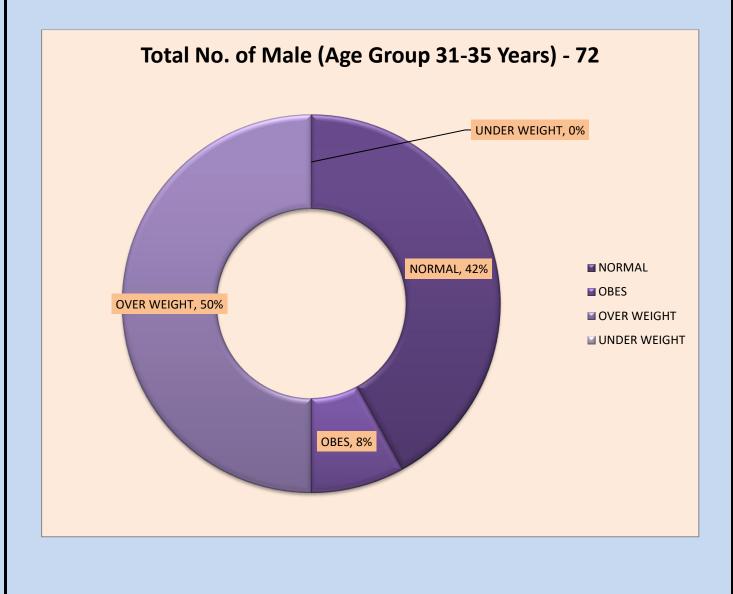
Status of Health according to BMI value	No. of Male	Percentage
NORMAL	303	72%
OBES	12	3%
OVER WEIGHT	72	17%
UNDER WEIGHT	33	8%



Age Group – 31 to 35 Years

# TOTAL NO. OF DATA COLLECTED FROM MALE OF AGE GROUP 31-35 YEARS 72

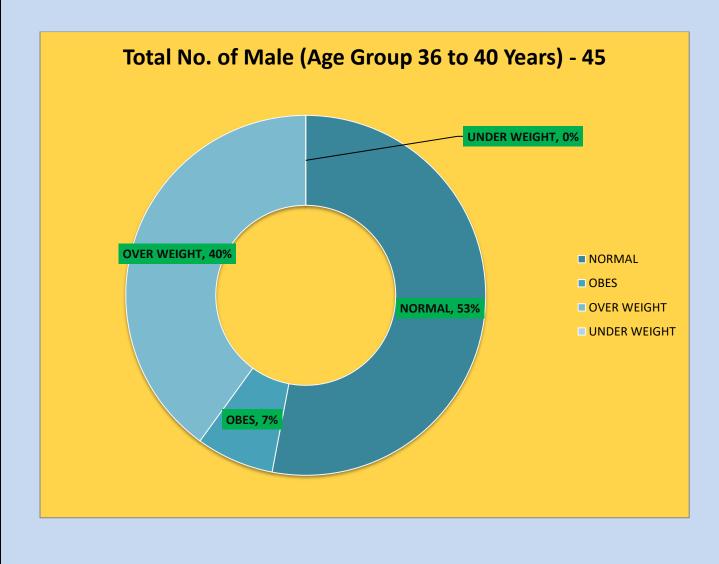
Status of Health according to BMI value	No. of Male	Percentage
NORMAL	30	42%
OBES	6	8%
OVER WEIGHT	36	50%
UNDER WEIGHT	0	0%



Age Group – 36 to 40 Years

# TOTAL NO. OF DATA COLLECTED FROM MALE OF AGE GROUP 36-40 YEARS 45

Status of Health according to BMI value	No. of Male	Percentage
NORMAL	24	53%
OBES	3	7%
OVER WEIGHT	18	40%
UNDER WEIGHT	0	0%



## Age Group – 40+ Years

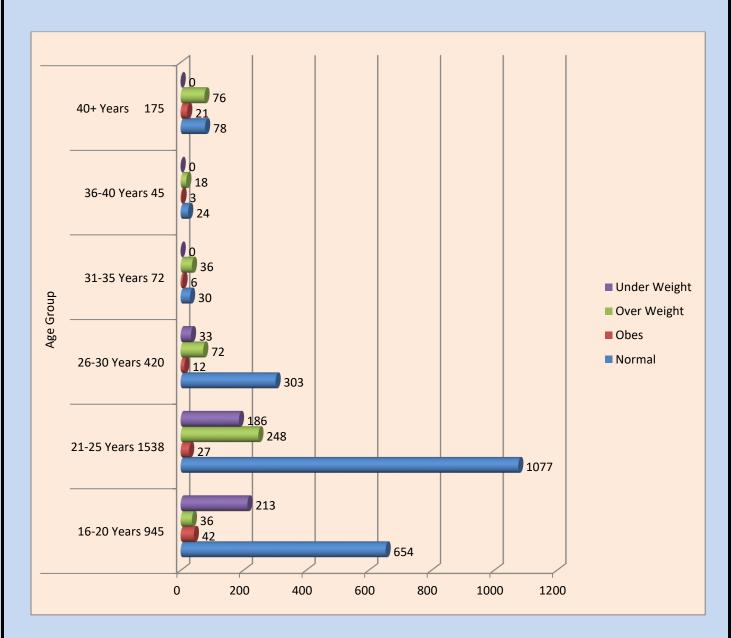
# TOTAL NO. OF DATA COLLECTED FROM MALE OF AGE GROUP 40+ YEARS 175

Status of Health according to BMI value	No. of Male	Percentage
NORMAL	78	45%
OBES	21	12%
OVER WEIGHT	76	43%
UNDER WEIGHT	0	0%



#### TOTAL NO. OF DATA COLLECTED FROM MALE – 3183

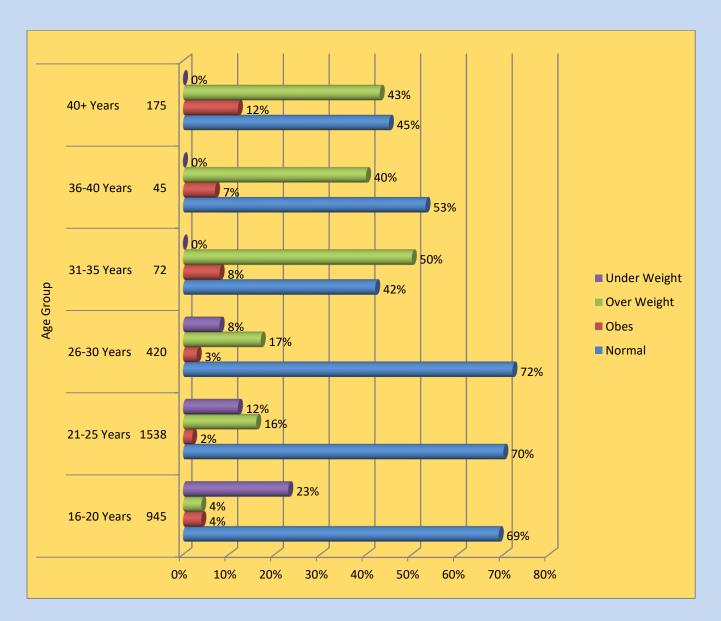
		Normal	Obese	Over Weight	Under Weight
	16-20 Years 945	654	42	36	213
	21-25 Years 1538	1077	27	248	186
Age Group	26-30 Years 420	303	12	72	33
	31-35 Years 72	30	6	36	0
	36-40 Years 45	24	3	18	0
	40+ Years 175	78	21	76	0



# **OVERALL UNIVERSITY MALE BMI PERCENTAGE** ACCORDING TO THEIR AGE

#### TOTAL NO. OF DATA COLLECTED FROM MALE – 3183

		Normal	Obese	Over Weight	Under Weight
	16-20 Years 945	69%	4%	4%	23%
A C	21-25 Years 1538	70%	2%	16%	12%
Age Group	26-30 Years 420	72%	3%	17%	8%
	31-35 Years 72	42%	8%	50%	0%
	36-40 Years 45	53%	7%	40%	0%
	40+ Years 175	45%	12%	43%	0%



# **BODY FAT PERCENTAGE**

#### **Body Fat Percentage Classification**

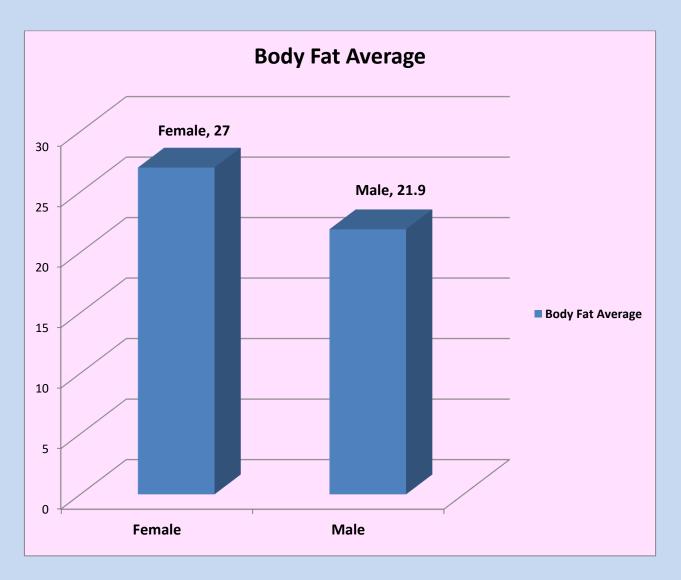
Body Fat Percentage		Classification
Male	Female	Classification
5.0 - 9.9%	5.0 - 19.9%	Low
10.0 - 19.9%	20.0 - 29.9%	Normal
20.0 - 24.9%	30.0 - 34.9%	High
25% & Above	35% & Above	Very High

TOTAL NO. OF DATA COLLECTED - 4158 NO. OF MALE - 3183 NO. OF FEMALE – 975

## UNIVERSITY MALE AND FEMALE BODY FAT PERCENTAGE AVERAGE

#### TOTAL NO. OF DATA COLLECTED - 4158 NO. OF MALE - 3183 NO. OF FEMALE -975

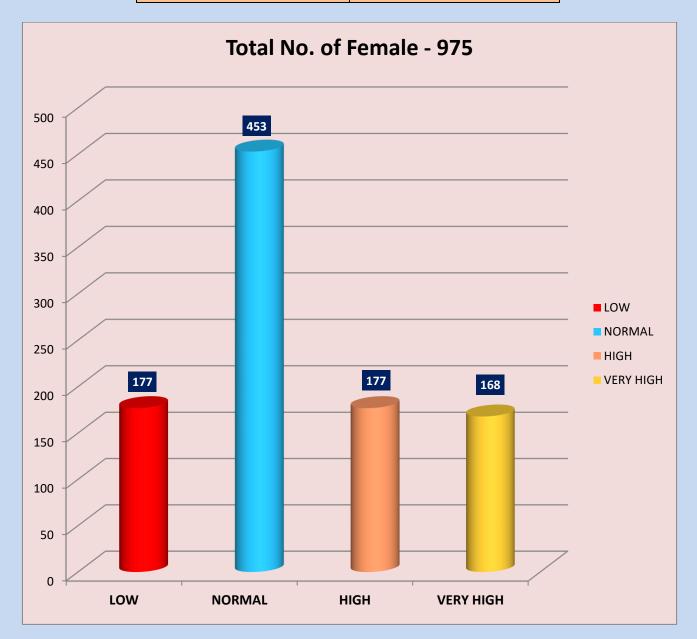
	Body Fat Average	Classification
Female	27%	Normal
Male	21.9%	High



#### UNIVERSITY FEMALE BODY FAT PERCENTAGE

#### TOTAL NO. OF DATA COLLECTED FROM FEMALE – 975

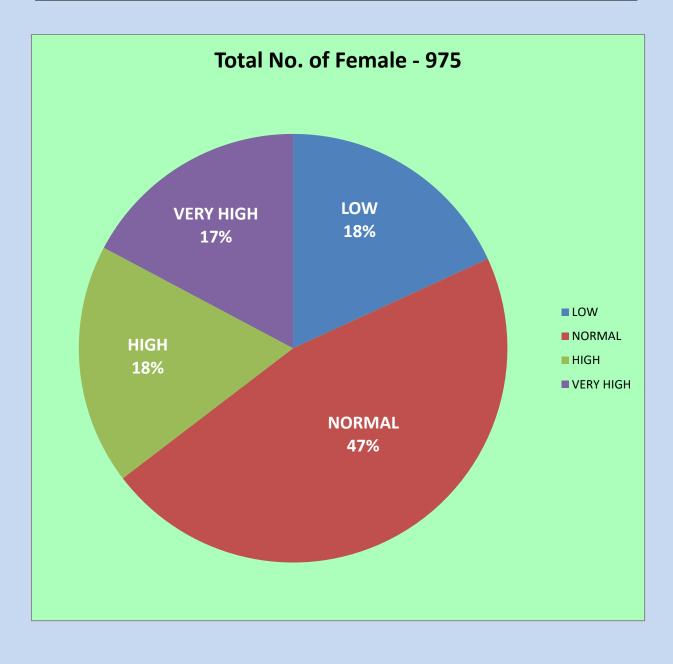
Status of Health according to Body Fat Percentage	No. of Female
LOW	177
NORMAL	453
HIGH	177
VERY HIGH	168



#### UNIVERSITY FEMALE BODY FAT PERCENTAGE

#### TOTAL NO. OF DATA COLLECTED FROM FEMALE – 975

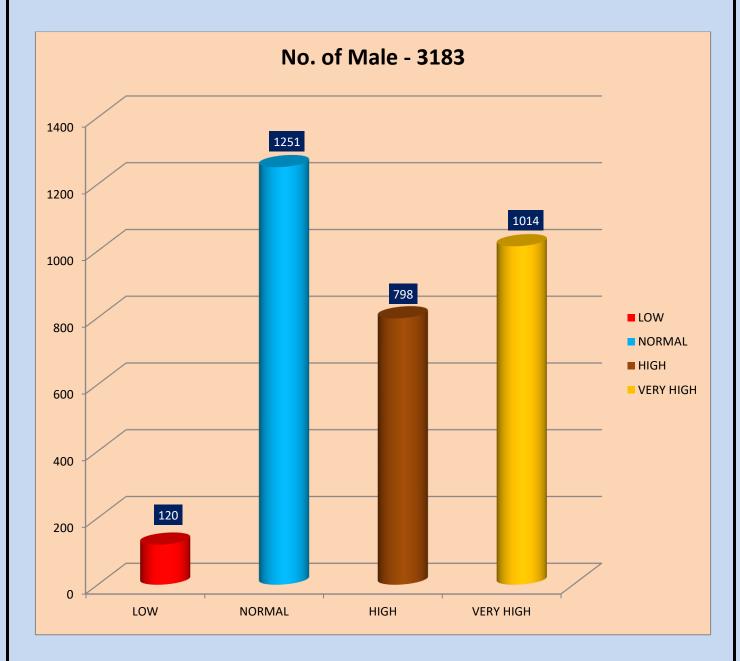
Status of Health according to Body Fat Percentage	No. of Female	Percentage
LOW	177	18%
NORMAL	453	47%
HIGH	177	18%
VERY HIGH	168	17%



#### UNIVERSITY MALE BODY FAT PERCENTAGE

#### TOTAL NO. OF DATA COLLECTED FROM MALE – 3183

Status of Health according to Body Fat Percentage	No. of Male
LOW	120
NORMAL	1251
HIGH	798
VERY HIGH	1014



#### UNIVERSITY MALE BODY FAT PERCENTAGE

#### TOTAL NO. OF DATA COLLECTED FROM MALE – 3183

Status of Health according to Body Fat Percentage	No. of Male	Percentage
LOW	120	4%
NORMAL	1251	39%
HIGH	798	25%
VERY HIGH	1014	32%

