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

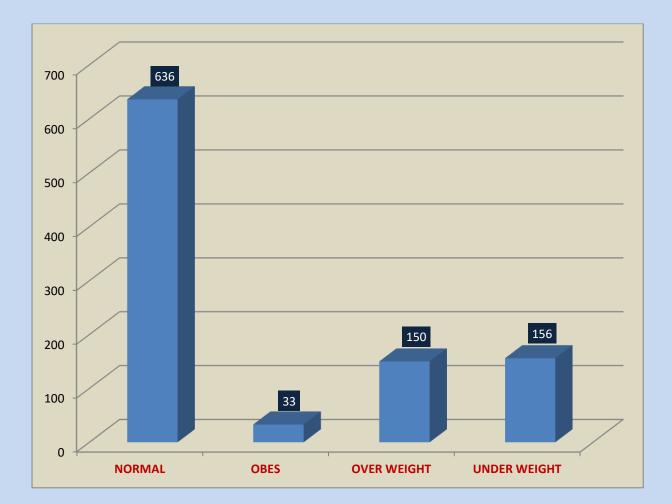
TOTAL NO. OF DATA COLLECTED - 4158 NO. OF MALE - 3183 NO. OF FEMALE - 975



UNIVERSITY FEMALE BMI STATUS

TOTAL NO. OF DATA COLLECTED FROM FEMALE – 975

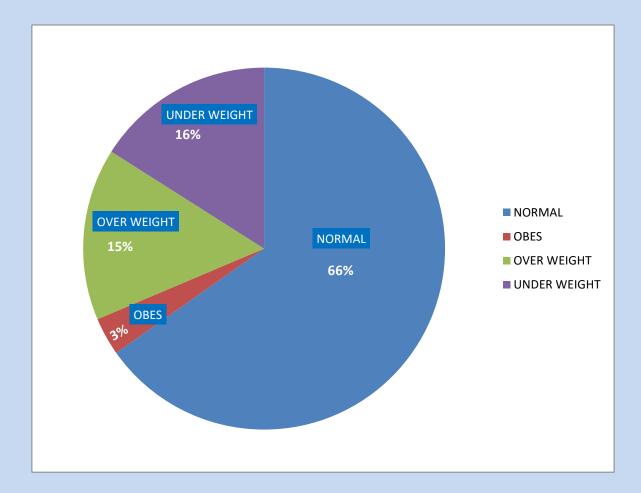
| Status of Health according to BMI value | No. of Female |
|--|---------------|
| NORMAL | 636 |
| OBES | 33 |
| OVER WEIGHT | 150 |
| UNDER WEIGHT | 156 |



UNIVERSITY FEMALE BMI STATUS PERCENTAGE

| TOTAL NO. OF DATA COLLECTED FROM FEMALE – 975 |
|---|
|---|

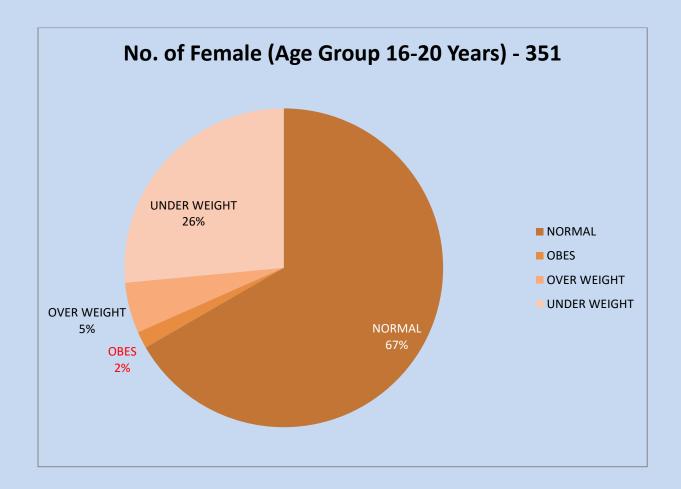
| Status of Health according to BMI value | No. of Female | Percentage |
|--|---------------|------------|
| NORMAL | 636 | 66% |
| OBES | 33 | 3% |
| OVER WEIGHT | 150 | 15% |
| UNDER WEIGHT | 156 | 16% |



Age Group – 16 to 20 Years

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

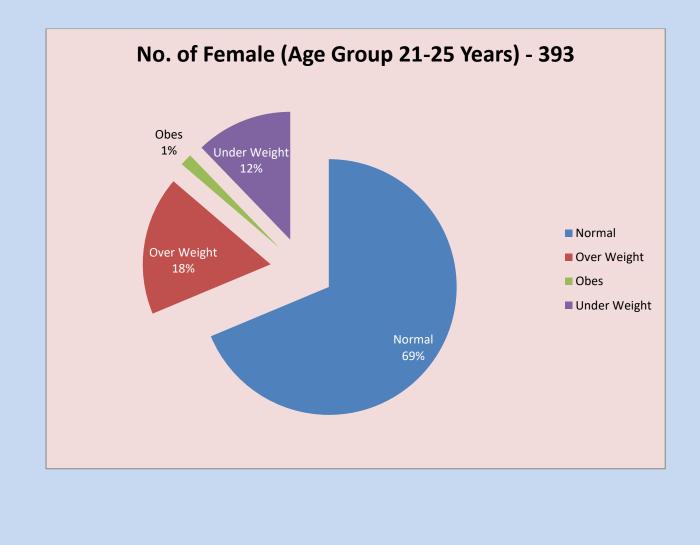
| Status of Health according to BMI value | No. of Female | Percentage |
|--|---------------|------------|
| NORMAL | 234 | 67% |
| OBES | 6 | 2% |
| OVER WEIGHT | 18 | 5% |
| UNDER WEIGHT | 93 | 26% |



Age Group – 21 to 25 Years

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

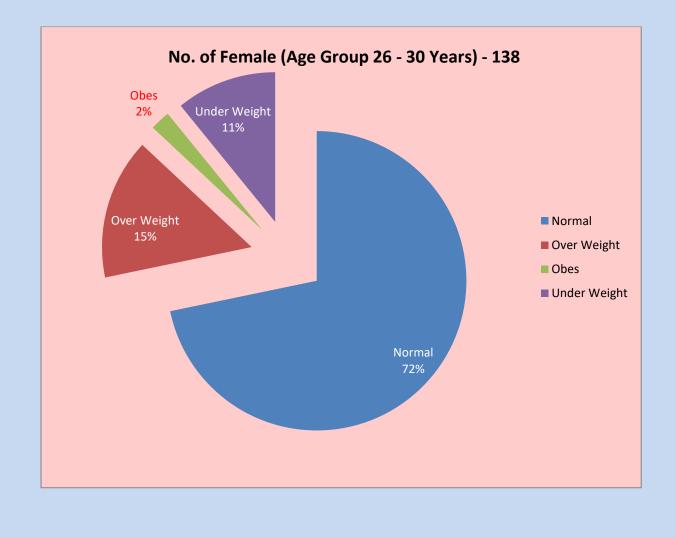
| Status of Health according to BMI value | No. of Female | Percentage |
|--|---------------|------------|
| NORMAL | 270 | 69% |
| OBES | 6 | 2% |
| OVER WEIGHT | 69 | 17% |
| UNDER WEIGHT | 93 | 12% |



Age Group – 26 to 30 Years

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

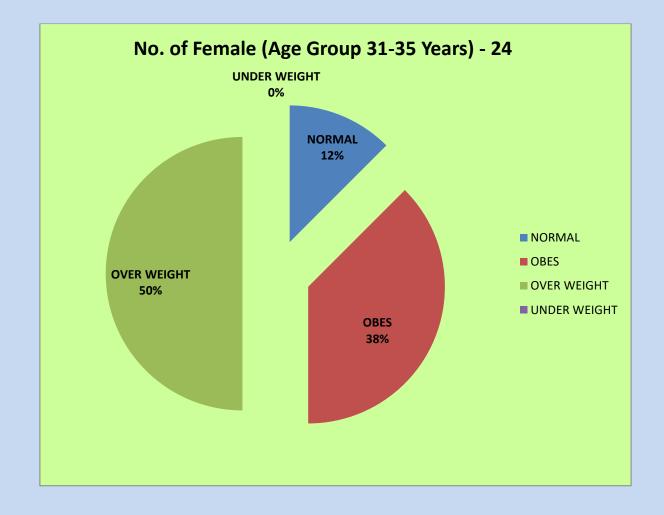
| Status of Health according to BMI value | No. of Female | Percentage |
|--|---------------|------------|
| NORMAL | 99 | 72% |
| OBES | 3 | 2% |
| OVER WEIGHT | 21 | 15% |
| UNDER WEIGHT | 15 | 11% |



Age Group – 31 to 35 Years

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

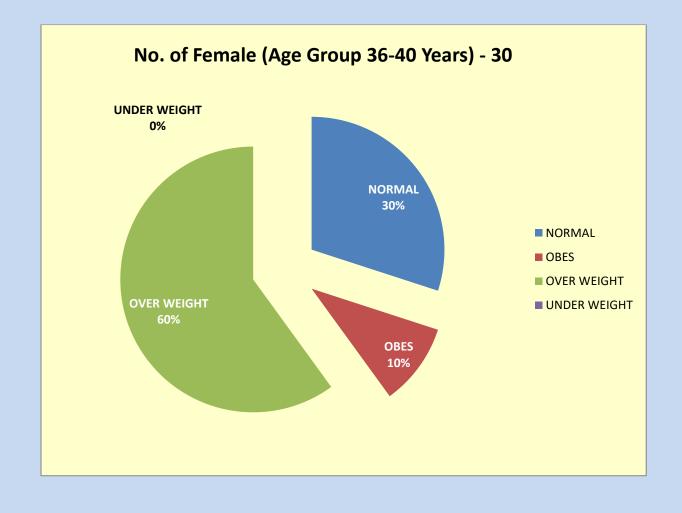
| Status of Health according to BMI value | No. of Female | Percentage |
|--|---------------|------------|
| NORMAL | 3 | 12% |
| OBES | 9 | 38% |
| OVER WEIGHT | 12 | 50% |
| UNDER WEIGHT | 0 | 0% |



Age Group – 36 to 40 Years

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

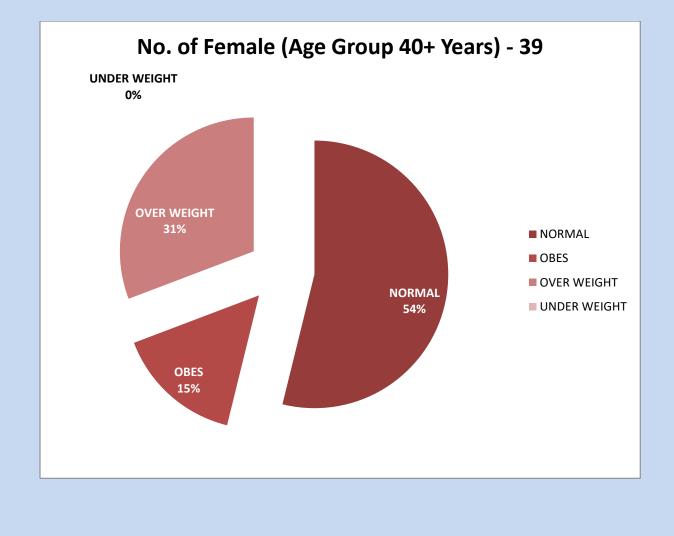
| Status of Health according to BMI value | No. of Female | Percentage |
|--|---------------|------------|
| NORMAL | 9 | 30% |
| OBES | 3 | 10% |
| OVER WEIGHT | 18 | 60% |
| UNDER WEIGHT | 0 | 0% |



Age Group – 40+ Years

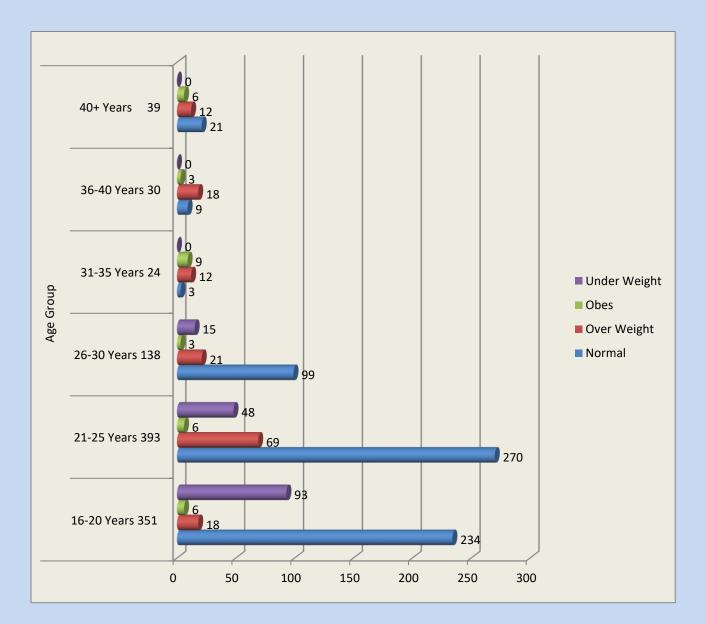
TOTAL NO. OF DATA COLLECTED FROM FEMALE OF AGE GROUP 36-40 YEARS 39

| 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

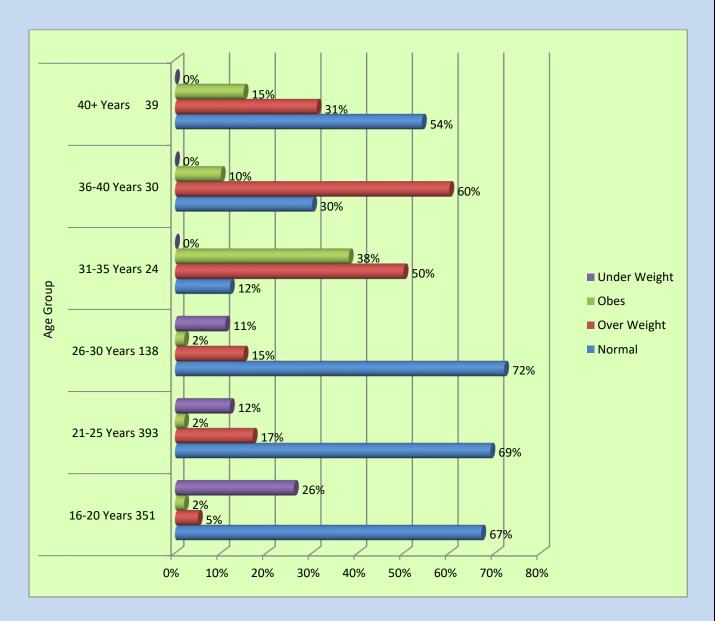
| | | Normal | Over Weight | Obese | Under Weight |
|-----------|-----------------|--------|----------------|-------|-----------------|
| | 16-20 Years 351 | 234 | 18 | 6 | 93 |
| | 21-25 Years 393 | 270 | 69 | 6 | 48 |
| Age Group | 26-30 Years 138 | 99 | 21 | 3 | 15 |
| | 31-35 Years 24 | 3 | 12 |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

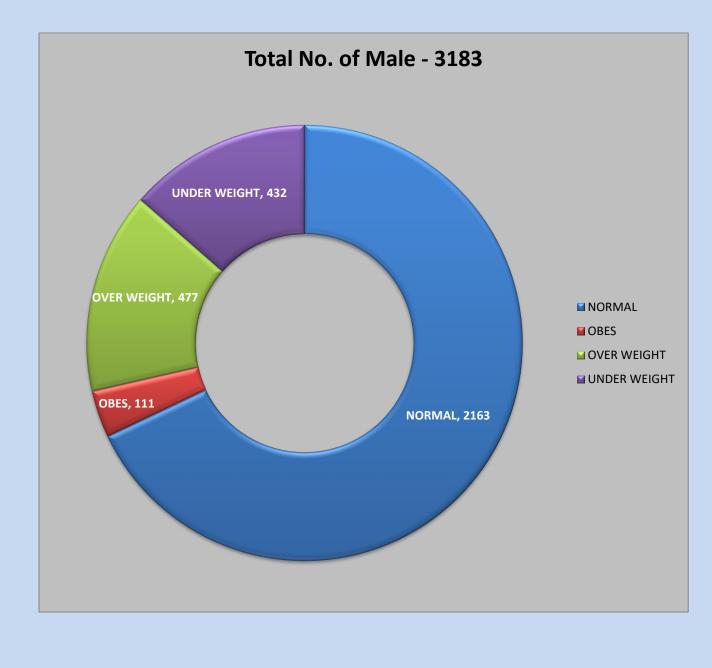
TOTAL NO. OF DATA COLLECTED FROM FEMALE – 975



UNIVERSITY MALE BMI STATUS

TOTAL NO. OF DATA COLLECTED FROM MALE – 3183

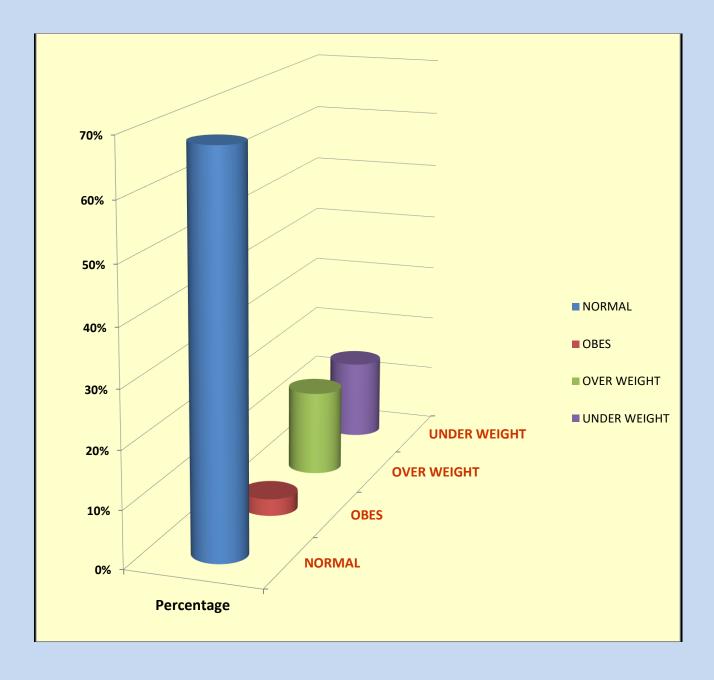
| Status of Health according to BMI value | No. of Male |
|--|-------------|
| NORMAL | 2163 |
| OBES | 111 |
| OVER WEIGHT | 477 |
| UNDER WEIGHT | 432 |



UNIVERSITY MALE BMI STATUS PERCENTAGE

TOTAL NO. OF DATA COLLECTED FROM MALE – 3183

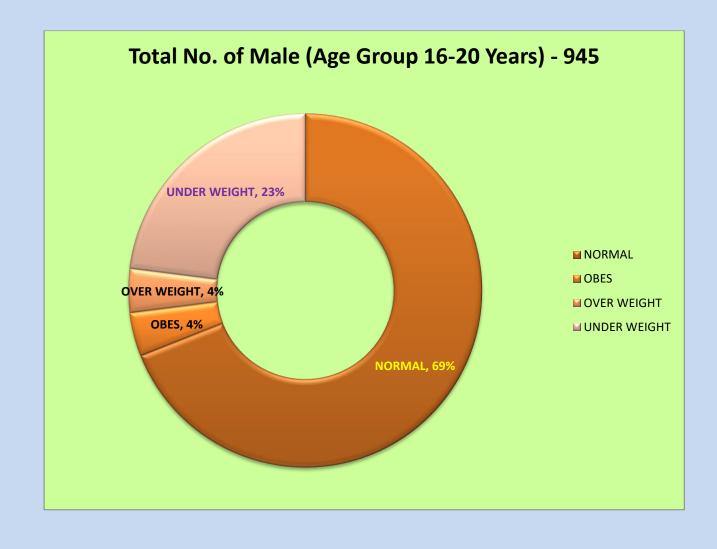
| Status of Health according to BMI value | No. of Male | Percentage |
|--|-------------|------------|
| NORMAL | 2163 | 68% |
| OBES | 111 | 3% |
| OVER WEIGHT | 477 | 15% |
| UNDER WEIGHT | 432 | 14% |



Age Group – 16 to 20 Years

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

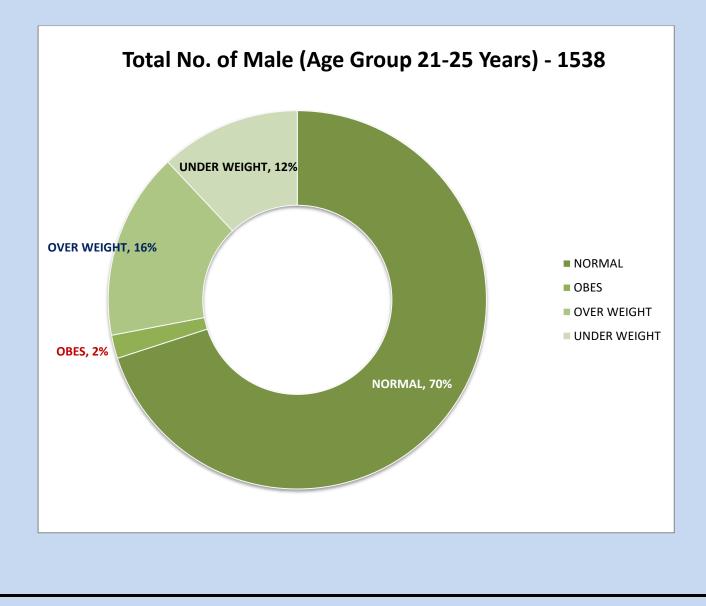
| Status of Health according to BMI value | No. of Male | Percentage |
|--|-------------|------------|
| NORMAL | 654 | 69% |
| OBES | 42 | 4% |
| OVER WEIGHT | 36 | 4% |
| UNDER WEIGHT | 213 | 23% |



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

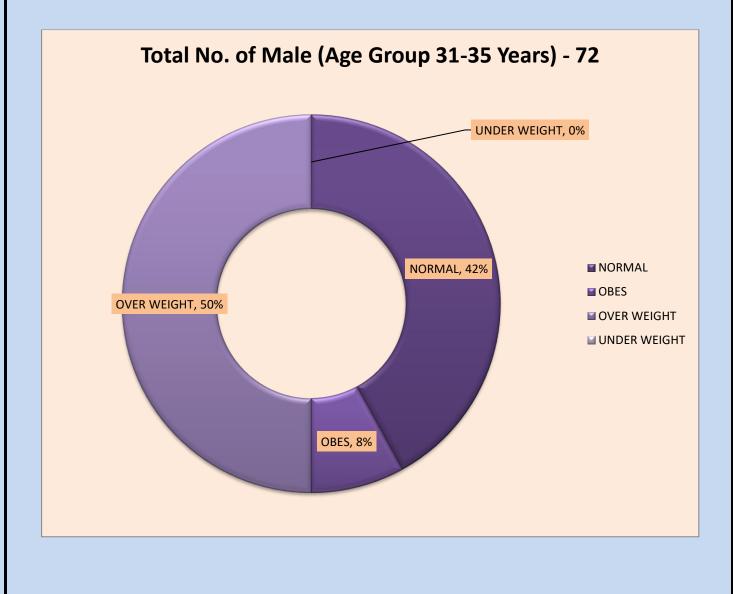
| Status of Health according to BMI value | No. of Male | Percentage |
|--|-------------|------------|
| NORMAL | 303 | 72% |
| OBES | 12 | 3% |
| OVER WEIGHT | 72 | 17% |
| UNDER WEIGHT | 33 | 8% |



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

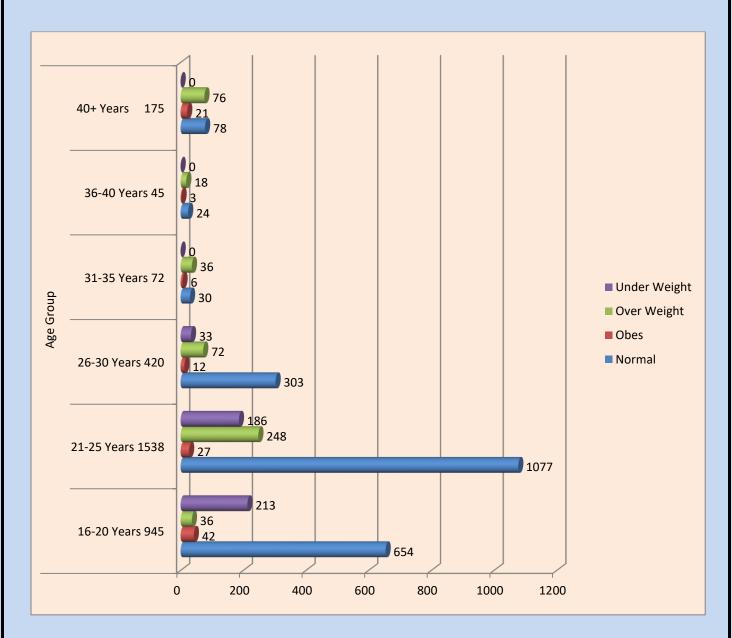
TOTAL NO. OF DATA COLLECTED FROM MALE OF AGE GROUP 40+ YEARS 175

| 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

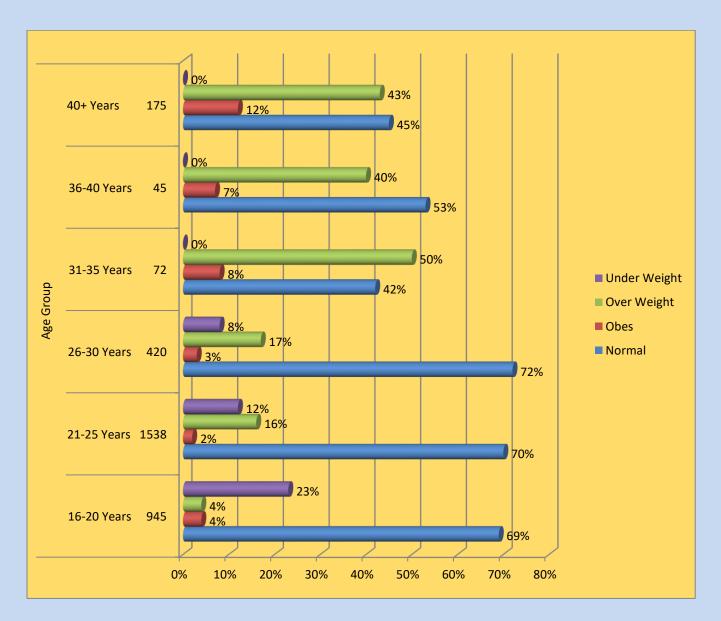
| | | Normal | Obese | Over Weight | Under Weight |
|-----------|------------------|--------|-------|----------------|-----------------|
| | 16-20 Years 945 | 654 | 42 | 36 | 213 |
| | 21-25 Years 1538 | 1077 | 27 | 248 | 186 |
| Age Group | 26-30 Years 420 | 303 | 12 | 72 | 33 |
| | 31-35 Years 72 | 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

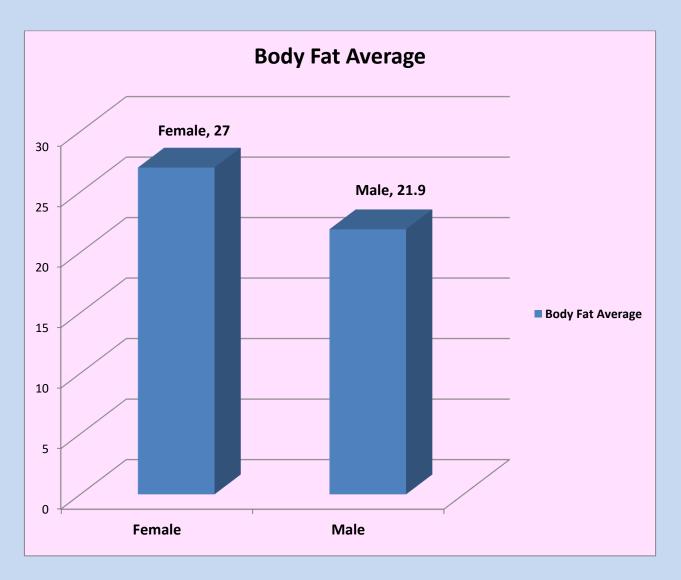
| Body Fat Percentage | | Classification |
|---------------------|--------------|----------------|
| Male | Female | Classification |
| 5.0 - 9.9% | 5.0 - 19.9% | Low |
| 10.0 - 19.9% | 20.0 - 29.9% | Normal |
| 20.0 - 24.9% | 30.0 - 34.9% | High |
| 25% & Above | 35% & Above | Very High |

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

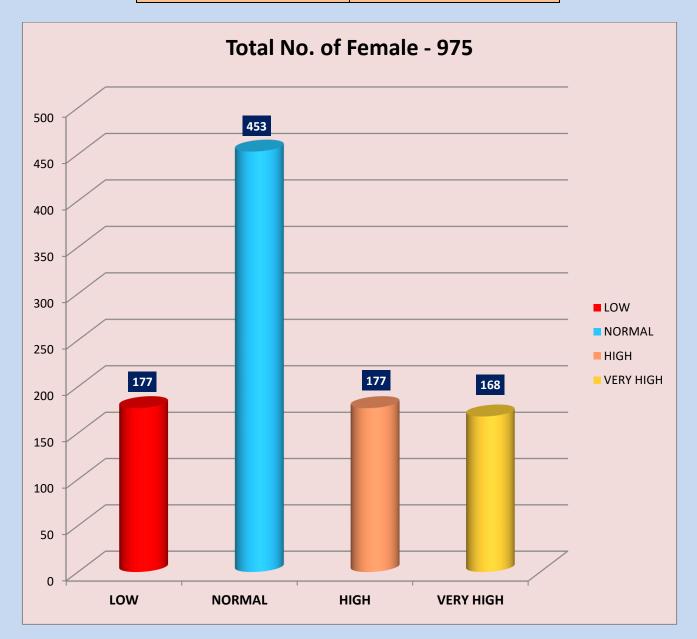
| | Body Fat Average | Classification |
|--------|---------------------|----------------|
| Female | 27% | Normal |
| Male | 21.9% | High |



UNIVERSITY FEMALE BODY FAT PERCENTAGE

TOTAL NO. OF DATA COLLECTED FROM FEMALE – 975

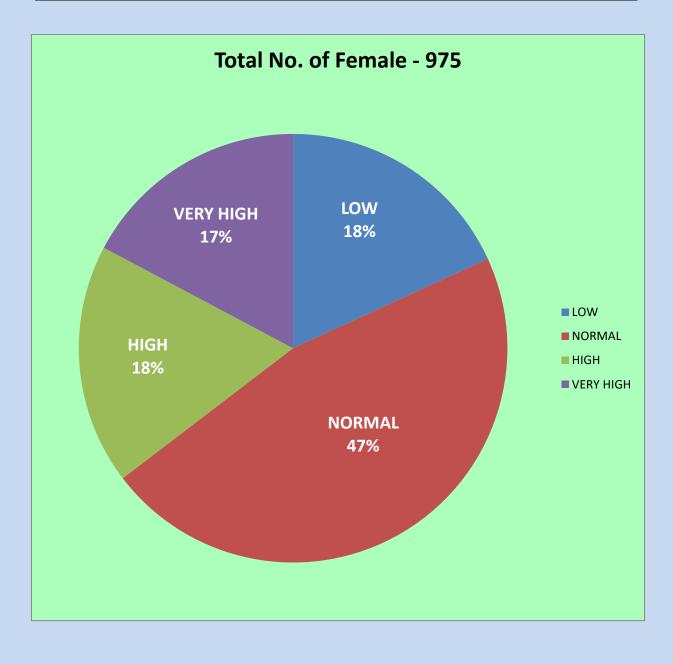
| Status of Health according to Body Fat Percentage | No. of Female |
|--|---------------|
| LOW | 177 |
| NORMAL | 453 |
| HIGH | 177 |
| VERY HIGH | 168 |



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% |

