Review of Related literature

Generally, development of norms for selection of football players in school requires consideration of many human as well as environment factor. Along with judging the skill performance of football players, associated psycho psychological, morphological and fitness factor also to be looked upon.

To get clear cut idea of selecting associated factors of a talented football player, ample of literature have been reviewed in this chapter. The detailed reviews have been classified as follows-

Review of related literature will be done in following major areas-
1. Studies on football research.
2. Studies on health related physical fitness.
3. Studies on development of test and norms.

Research in the above mentioned areas-

Jeleskovic et.al.,(2008). Complex football trainings influence on the qualitative changes of the basic motor abilities. Main goal of this research is to determine the level of change in basic motor abilities with footballers who are undergoing one year training process. Research included 107 16 and 17 years old footballers actively training and playing in cadet’s championship. 17 tests of abilities have been used to evaluate the basic motor abilities: explosive power, speed, coordination, repetitive power, flexibility and balance. Tests were standardized and publicized. The program lasted for a year and its main feature was the mixture of working methods where the training processes were designed in a way that drill training and no ball trainings were dominant. We have analyzed the qualitative changes in the structure of basic motor abilities in football and the differences in the structure of the covariance matrix of the manifest and latent variables in two places in time, from which the component model of the factorial analysis is derived. In transformation of a basis motor abilities, as well as to positive qualitative changes in the structure, position and the number of latent dimensions, as well as in hierarchical subordination of the centers for the structure of swinging.

Rezic et.al.,(2009). Changes in some motor-functional abilities in football players of younger age groups after three-month kinesiology treatment statistically significant differences in several motor and functional abilities between initial and final measurements were determined on the
specimen of 47 footballers aged 15 and 16. The measurement was carried out during three months pre-season training. Transformational process contents included practice for pace expansion (sprint), agility, explosive strength and stamina. T-test results showed that the difference between two measurements was evident in all applied tests except explosive strength test (test for horizontal jump intensity) after only three months. Vertical jump intensity was rather emphasized than horizontal one. The main reason was that Vertical jump intensity is more common and often in football and also during the training. These results can serve as a guideline for youth coaches’ especially during training session correction. According to this they should increase and encourage practice for horizontal jump intensity. Globally, these kinds of data, referring to significant differences measured during pre-season training, were expected due to high training intensity based on basic motor and functional abilities development.

Shinde,(2005).Prepared standardization of norms for health related physical fitness of first year college student, in this study total (12075) college going male student are taken as a subject from different colleges of Marathwada University. The purpose of study was to standardize norms for this study; 12 Min. run & walk Sit-ups, Grip strength, Body fat (Oman machine), Height and Weight for BMI, Sit & Rich.

Thomas,(2000).Under construction and standardization of specific physical fitness test for soccer players. His study was confined to district level soccer players of the age 17 to 21 years from different districts of Kerala state. The test items were Push- ups, bent Knee sit ups, burpee jump, SBJ, Vertical jump, kicking for distance (Football) 12 m. run & walk, one mail run, 800 m. run, 30 m. run, 50 m. run, 70 m. run, shuttle run Illions agility test, bridge up test, trunk extension test, sit and reach test, from raw score a significant difference in the means was found to exist between the test variables when applied to the successful and unsuccessful soccer players.

Wisloff et.al.,(1998).Strength and endurance of elite soccer players. The major purpose of the present study was to examine whether there exists a relationship between preseason physiological tests and performance results in the soccer league. Further, it investigated maximal oxygen uptake and maximal strength in proportion to body mass for soccer players. A secondary aim was to establish some normative data of Norwegian elite soccer players. Methods: Two teams from the Norwegian elite soccer league participated in the study. Results/ Conclusion: The present study supports previous investigations indication a positive relationship between
maximal aerobic capacity, physical strength, and performance results in the elite soccer league. It is concluded that for soccer players, maximal oxygen uptake should be expressed in relation to body mass raised to the power of 0.75 and maximal strength in relation to body mass raised to the power of 0.67, when the aim is to evaluate maximal aerobic capacity when running and strength capacity among players with different body mass. Midfield players had significantly higher maximal oxygen uptake compared with defense players using the traditional expression, mL.kg-1 min-1, while no significant differences were found expressing maximal oxygen uptake either absolutely (L.min-1) or in relation to body mass raised to the power of 0.75 (mL.kg-0.75.min-1) among players grouped by position. There was a significantly correlation(r=0.61, P<0.01) between squat IRM and vertical jump height. Vertical jump heights for defense and forward players were significantly higher compared with midfield players. Mean result from the laboratory test were 63.7 mL.kg-1 min-1 or 188.6 mL.kg-0.75.min-1 for maximal oxygen uptake, 150 kg or 8.0 kg.mb0.67 for 90o squats, 79.9 kg or 4.4 kg. mb0.67 for bench press. Mean values of Vertical jump height were 54.9cm.

Prakash,(1995). Has worked on construction and high school boys standardization of physical fitness test for high school boys. For study selected age group of 13 to 15 years from 180 high school boys of eleven identified institutions, Dakshine Kannada District, Karnataka, India 32 test variables were administered on subjects. They were age weight, height, push-ups, reverse sit ups, 2 Hope by dominated. Leg jumps by both leg. Medicine ball throw over head medicine ball throw, basketball throw leg raise, upper body raise, Push-ups, burpee, sit ups leg raise, m. hopping. The raw score have been converted into standard T-score for the age group of 13 to 15 years high school boy

Devi,(1984).Construction of norms for a motor fitness test for secondary school girls. For this purpose, she selected 80 students of central school no-1 Gwalior from grades eight and nine as subjects for this study AAHPER Youth Fitness test was administered on all subjects. Based on mean and standard deviation values, T-scale, 6 sigma scale and hull scale were prepared for each test items. Also it was concluded that a common scale of AAHPER Youth Fitness test could be used for grades eight and nine and 6 sigma scale and hull scale were more suitable than T-scale.

Sandhu,(1987).Construction of motor fitness test for female volley ball players. The subjects of her study were 300 volleyball players. The subjects representing different colleges of the state of
Punjab they were from different university of Punjab and their age was ranged from 17 to 21 years factors analyses were used to construct motor fitness test. The subjects were tested on 27 different items of motor fitness test through the factors analyses technique. 10 factors were expected after an orthogonal rotation of maximum loading were selected for test battery, which consisted of seven tests namely, spike jump, W.M.Run, W.M. agility, push-ups, 20 meters run, the stick test and bend and reach test. The scientific authenticity of the test was established by computing reliability, objective, validity and specificity. For preparation of the norms 300 female volley ball players were selected. The hull-scale and T-scale were used to prepare the norms for different test items for college female playing volleyball.

Narain,(1987). Construction and standardization of specific physical fitness test for badminton players. He used factor analysis technique on the data of 100 inter-college/ district badminton players of northern Indian. As many as 7 factors of specific physical fitness were obtained, out of which, five were considered as meaningful to select test items. From each factor one test item having the highest loading was included in the test battery from each factor the test items these derived were applied on 500 badminton players to develop the norms. The selected five factors were trunk strength, flexibility, badminton agility, badminton endurance and arm leg explosive strength and the test items selected endurance specific physical fitness test for badminton players were sit-ups, court agility, trunk flexion, six corners endurance and softball throw factor analysis technique was used to select the test items out of twenty variables.

Kangane,(2004).Development and Standardization of test battery for the selection of Junior Hand Ball players of Maharashtra, in this study total 600 male students are taken as a subject from Maharashtra. The purpose of study was to develop and standardize test battery for selection of junior handball players of Maharashtra. Selected test item are used for this study, 12 min. Run walk test, Sit- ups, Push-ups, Handgrip, Shuttle run, Vertical jump, 50 mtr. Dash, Sit & Rich, Height, Weight, Fat %, Fat mass, BMI, H.R., B.P., P.E.F.R. , R.R., skill test of Handball.

Guruvammal,(1984). Constructed norms in selected Physical Fitness test items for secondary schools girls in madras city 10 girls from each ten randomly selected schools were taken as subjects and tested on the selected Physical Fitness test items, consisting of sit ups, vertical jump, flexed arm hang, 4×10 Meter shuttle run, 50 M. Dash and 600 m.run. The percentile scales were
computed for the combined sample of the girl’s student. It was also conducted that performance of the girls. A student was very poor in the selected test items.

Davids, et. al.(2000). Understanding and measuring coordination and control in kicking skills in soccer, Implications for talent identification and skills acquisition. In this review, we explore the role of motor control and biomechanics in developing an understanding of soccer skills using kicking as the main vehicle. The links between these sub-disciplines of sport science have not been well established in the past because of an emphasis on cognitive processes in traditional accounts of motor behavior. We argue that a dynamical systems interpretation of the processes of coordination and control in movements with multiple degrees of freedom signals a new era in the relationship between the sub-disciplines of motor control and biomechanics. Although research on coordination and control of soccer skills is currently sparse, there are indications that the relationship between motor control and biomechanics could from a significant component of scientific programmers in talent identification and skill development. Further interdisciplinary work is needed to enhance understanding of coordination and control of soccer skills.

Kumar,(1998). The main purpose of the study was to evolve physical fitness norms on various items of Fleishman’s fitness battery for high and higher secondary school boys of Himachal and also the physical fitness level of the secondary school male student of Himachal Pradesh. To accomplish the study 3840 student between the age group of 13 to 16 years were randomly selected from both the urban and rural area. The results have shown that there was significant difference from 15 years to 16 years male subjects of Himachal Pradesh in almost all fitness components. The boys of 16 years were found significantly superior than 15 years to 13 years boys. The 15 years boys were better than 14 and 13 years boys. Similarly 14 years boys were superior to 13 year boys in all the components of Fleishman’s test battery. The result of the study has also shown that male subjects in six of ten fitness components of Fleishman’s test battery.

Ramputty,(1998). Construction of norms in selected fitness test items for girls of age group 12-16 years in Gwalior district. She administered the test on 650 students of Kendriya vidyalaya and public schools of Gwalior district. The test items were flexed armed hang, curl up, sit and reach,
shuttle run, one mail run/ walk, 50 yard dash standing broad jump. The data obtained was correlated following the product moment correlation method.

Singh,(1999).Construction of a specific test battery of motor fitness for football players. The subjects were 50 male football players of LNIPE Gwalior. The parsons product moment correlation ® was used to know the contribution of all items of football to football performance the results of the study shown that kicking for distance, 70 meters run, 1 mail run and W.M. agility run with ball contribute much to playing ability in football among motor fitness.

Hoffman,(2006).Norms for Fitness, Performance, and Health. Norms for Fitness, Performance, and Health contains a comprehensive collection of normative data for numerous fitness, performance, and health components across a range of ages, ability, occupations, and athletic backgrounds. It lays the foundation for working with normative data by detailing the purpose and benefits of norms. It reviews relevant statistical information to assist the reader in understanding and interpreting descriptive statistics, including a limited discussion on inferential statistics.

Mondal,(2006).Physical and motor fitness level of Indian (Bengalee) school going girls. To develop percentile norms of the Physical and motor fitness test measurements of Indian (Bengalee) girls of 9-18 yrs. Four hundred ninety normal, healthy school going girls (9-18 yrs) were randomly selected from the student population of different schools of semi urban areas surrounding Kolkata ‘West Bengal’, India for Physical and motor fitness measurements with advancement of age except physical fitness Index (PFI) maximum increase was observed in between 11 and 13 years of age. All the fitness test scores showed positive correlations with age, height and weight but dash, shuttle run and PFI showed a significantly negative relationship. Indian girls and rural Panjabi girls of comparable age. The girls in this present study were inferior in vertical jump to their American counterparts. In dash and shuttle run test scores, Indian girls placed in the 5th percentile level and between the 10th to 15th percentile values of
Indian (Bengalee) girls are useful in determining their present fitness status and potentiality in that particular community for specific sports activity.

Duraskovic et.al.,(2004).Weight-Height Parameters of the 2002 World Football Championship Participants. Contemporary football tends more and more to demand appropriate body structure. Strong, enduring bodies, extensive football intelligence, controlled aggressiveness, highly developed functional and motor abilities, and a sense for improvisation and a collective game, of football players. The aim of this research is to define the average values of all the 712 participants in the 2002 world football championship by analyzing height and body mass as well as certain weight-height relations. The research results point to the fact that the average height of all the participants in the 2002 world football championship is (180.90± 6.13) cm and the average body mass is (75.91± 6.38 kg.) the biggest average height was noted in the case of goalkeepers, than defense and offense players, and the smallest height (173.36±5.55cm) and body mass (73.87± 5.55 kg) was noted in the case of connecting players. The first team of Brazilian football players, the champions of this tournament (2002), is distinguished from second ranked Germany and third ranked Turkey and all the other participants. Brazilian football players are on average younger. They have played longer for their national team; they are of smaller body mass and weight-height index.

Bajric,(2008).Partial and global quantitative changes of motor abilities in football players 14 to 16 years of age. This research work was carried out on the sample group of 137 football players, 14 to 16 years of age from football clubs in the area of central Bosnian canton. The research applies a set of 15 tests of motor abilities, which determine velocity, explosive and repetitive strength, coordination and flexibility the basic aim of the research was to determine the partial and general quantitative changes that developed as a result of programmed training activities over a period of six months. The analysis of possible changes (differences) between the initial and final measurements of motor abilities has been performed using T-test for dependent sample and discriminative analysis. On the basis of obtained values of the T-test it has been established that significant positive changes (partial transformational quantitative effects) in all the variables applied in the field of motor abilities developed as a result of the applied programmed training activities. On the basis of obtained values of discriminative analysis it has been established that there occurred statistically significant general quantitative changes in the field if motor abilities;
the most important refer to repetitive strength, flexibility and segmental velocity of lower extremities. On the basis of obtained values of the T-test for the depended samples and the values of discriminative analysis it can be concluded that statistically significant positive changes (partial and general quantitative transformational effects) in all the variables of motor abilities develop as a result of the applied programmed training activities.

Tesanovic et.al,(2010). Relations between the body mass index and the anthropometric dimensions and the results achieved in shot put. The training process in shot put throwing is based on the development of general and specific preparations. Most of the time is spent on the development of meteoric abilities of absolute strength, explosive strength, movement speed, and coordination. Research has shown that apart from the correct throwing technique and the angle that the ball is thrown from, the performance is also influenced by the morphology features of the thrower. It is obvious that top thrower differ in their bodily features. Some are more corpulent, some athletically built with emphasized musculature, and some are extremely high and some short. This research included a sample of 112 secondary schools pupils, males, of 15 ±6 month age difference with an aim to explore the relation between the body mass index and the anthropometric dimensions and the achieved shot put throwing result. The result achieved in shot put, and that the anthropometric length of the arm, the arm range and body mass can influence the achievement of results in shot put, while the length of the legs plays no statistically important role in the achievement of results.

Kostic et.al.,(2002). The influence of dance structure on the motor abilities of preschool children. This research has been conducted with the purpose of determining to which extent it is possible to transform the motor abilities of children by dance content. The sample of children used consisted of 30 boys and 30 girls, 5.5-6.5 years old. The motor abilities were evaluated on the basis of nine variables (one for-strength, two for speed, two for flexibility, two for balance, and two for coordination). The boys and girls were involved in an experiment which lasted for 48 hours and consisted of practicing dance steps for three hours a week, over a period of four months. After this, the final measuring was carried out. By calculating the coefficient of the descriptive statistics, the coefficient of the T-test and the walks’ Lambda coefficient, the data
was collected. Based on the results of the research it can be concluded that there is a significant statistical difference between the initial and final measuring. In the second measuring, there is a significant difference between the entire variable except in one variable for the speed of the boys and two variables for the speed of the boys and two variables for the speed of the girls. The results showed that motor abilities of boys and girls could be accepted.

Frey et.al..(2006). Relationship between BMI, physical fitness, and motor skills youth with mild intellectual disabilities. The negative impact of obesity on physical fitness, and motor abilities has been documented in youth of various ages; however, this issue has not been explored in youth with mild intellectual disabilities (ID). Youth with ID are considered more over weight, less physically fit, and less motor proficient than peers without ID, so it is important to determine if these variables are associated in this population. The purpose of this study was to examine the relationship between body mass indexes BMI, physical fitness, and motor skills in a large sample of youth with mild ID. A systematic, stratified with mild ID, aged 6-18 years, from eight special education schools in Hong Kong. Physical fitness was assessed using items from the national Hong Kong assessment: 6- (ages 6-8 years) or 9- (ages 9-18 years) minute run, sit-ups, isometric push-up, sit and reach and sum of skin fold. Functional motor skills were assessed in 244 youth from the fitness sample using the test of gross motor development-II, subject were categorized into normal or overweight/obese BMI groups based on international cut off point results-approximately 20% of the sample was classified as overweight/obese (average BMI normal=17.47±2.69; overweight/obese=24.78±4.05). ANCOVA controlling for age and gender revealed group differences in the run (P=0.001) and push-ups (P=0.05), but not in the motor or other fitness variables. After controlling for age and gender, BMI was correlated with the run (R= -0.27, P<0.001) and push-ups (R= -0.18, P=0.008). Age and gender were entered as the first block in hierarchical regression and accounted for most of the variance in all depend variables, except sit and reach. The inclusion of BMI in the second block added to the model for run and push-ups only (ΔR2 run= 0.04, push-ups=0.03, P<0.001). Conclusion is overweight/obesity is minimally associated with aerobic fitness measures (sit-ups, sit and rich) or motor skills in the sample. The undesirable level of overweight/obesity in this sample requires increased attention and immediate intervention.
Rakovic et.al.,(2008). Weight-height relations as an important factor of success in race walking. Race walking is a sports discipline requiring from the athlete, a race walker, a possession of certain anthropometric characteristics which apart from optimally administered training sessions, exert some influence on the achievement of the top results in this sports. Supposed to animate and appeal a great number of competitors because it is meant not only to have a competitive part but also a recreational one as well. The aim of this research is to present some weight-height relations of the world championship. These results would prove useful for the coaches and sports experts in their selection of the children for race walking. The obtained results point to the fact that the average body height is 176, 51± 5, 52 cm, and body mass is 64, 85± 5, 02 kg. According to the average values of the body mass index (20, 80+ 1, 07 kg/m2) race walkers belong to the group of lower limit values of the normally nutrition persons. These athletes have on average smaller body mass for 5 kg compared to the ideal body mass calculated by the Lorenz formula.

Dyakova et.al.,(2010). Study on the occurrence of abnormal body mass index (BMI) in female students. The female students are a special group with a very specific status. The body mass index (BMI) is used to determine the normal values of the weight and the degree of fattening in adults aged over 18. The aim of this research is to study the distribution of abnormal BMI in female students; the objects of the study are 1357 female students from troika university- stare 2agora in 2004,2005,2007,2008 and 2009. As a conclusion we can say that the abdominal body mass female students are a serious problem for the solution of which concrete measures should be taken. We recommend that modules with purposeful complex activities should be included in the curricula of higher schools. The introduction of elective subjects in the secondary and higher school or making personal program for individual study would contribute to the elimination of the abnormal body mass problem.

Huang, et. al.(2007). BMI and health-related physical fitness in Taiwanese youth 9-18 years. The purpose of the study was to evaluate the cross-sectional relationship between BMI and a physical fitness index (PFI) based on four indicators of fitness in a national sample of Taiwanese youth. Methods- Height, weight, and four measures of physical fitness (sit-ups completed in 60 s, Standing long jump, sit and reach, and 800- or 1600-m run/ walk) were measured in a national sample of 102,765 Taiwanese youth 9-18 yrs of age- 50,940 girls and 51,825 boys. BMI was calculated for each subject. Within each sex-specific half-year age group, students were
classified into five BMI categories based on national percentiles- very low, BMI > 5th percentiles, low, BMI ≥ 5th but < 15th percentiles, normal, BMI > 15th but < 85th percentiles, high, BMI ≥ 85th but < 95th percentiles, and very high, BMI ≥ 95th percentiles. Z-score based on sex- and age-specific means and standard deviations were calculated, and age the sum of z-score for four fitness tests was used as a PFI. Differences in PFI between BMI categories within each sex-specific half-year age group were compared with ANOVA with Bonferroni adjustment. Sex-specific regressions of PFI on BMI, using a nonlinear quadratic model, were done in four broader age categories. Relationships between BMI and PFI are very with age from late childhood through adolescence. With increasing age during adolescence, the relationship becomes parabolic, and then girls. Conclusion-PFI declines in a curvilinear manner with increasing BMI among youth 9-18 yrs of age, but the slope of the relationship varies with age.

Hands, et. al.(2008). The relationship among physical activity, motor competence and health-related fitness in 14-years old adolescents. Physical activity, physical fitness and motor competence are important health-related constructs. However, the relationship among them, particularly for children and adolescents, is still unclear. In this study, motor competence (measured by the McCarron Assessment of Neuromuscular Development), pedometer-determined physical activity and physical fitness (aerobic fitness, muscle strength, muscle endurance, flexibility and body composition) were examined in a cohort of 1585 adolescents (771 girls, 814 boys) of mean age 14.06 years. Significant gender differences were observed for all shoulder flexibility, males outperformed females. For both males and females, motor competence was associated with all fitness measures, physical activity was associated only with aerobic fitness and aerobic fitness was associated with physical activity, motor competence, BMI and chest pass. Among males, aerobic fitness was also associated with all other fitness tests. The correlations were, in gender, moderate to weak. The results challenge the current focus on physical activity rather than physical fitness as the preferred intervention.

Joseph, et.al.(2002). Analysis of Lipoproteins and Body Mass Index in professional football players. Exercise is known to improve lipoprotein levels, whereas an elevated body mass index (BMI) is associated with less favorable lipoprotein levels. To date, there have been no reports of
lipid analyses in elite athletes who also have BMIs in ranges considered unhealthful. The purpose of this study was to elevate the lipid-lipoprotein profile in a group of professional football players and to determine what association exists between these profile and the players BMIs. An observational study was conducted of 70 professional football players from one National Football League team. Measurements included BMI (kg.m$^{-2}$) and fasting serum lipid analysis. BMI and position played were found to correlate (p<0.001), with lineman having the highest mean BMI, 38.1 kg.m$^{-2}$. Comparing mean lipid values among BMI categories demonstrated lower high-density lipoprotein cholesterol level (p<0.01), higher triglycerides (p<0.05), and higher total cholesterol/high-density lipoprotein cholesterol ratios (p<0.001) with an increasing BMI. Was associated with a more favorable lipid-lipoprotein profile. Among the elite athletes in this study with the highest BMIs, exercise may not confer the same protective benefits on cardiovascular risk as it does in those athletes with normal BMIs.

Huang et al. (2007). BMI and health-related physical fitness in Taiwanese youth 9-18 years. The purpose of the study was to evaluate the cross-sectional relationship between BMI and a physical fitness index (PFI) based on four indicators of fitness in a national sample of Taiwanese youth. Methods-Height, weight, and four measures of physical fitness (sit-ups completed in 60 s, Standing long jump, sit and reach, and 800- or 1600-m run/ walk) were measured in a national sample of 102,765 Taiwanese youth 9-18 yrs of age- 50,940 girls and 51,825 boys. BMI was calculated for each subject. Within each sex-specific half-year age group, students were classified into five BMI categories based on national percentiles- very low, BMI> 5$^{th}$ percentiles, low, BMI ≥ 5$^{th}$ but < 15$^{th}$ percentiles, normal, BMI > 15$^{th}$ but < 85$^{th}$ percentiles, high, BMI ≥ 85$^{th}$ but < 95$^{th}$ percentiles, and very high, BMI ≥ 95$^{th}$ percentiles. Z- Score based on sex- and age-specific means and standard deviations were calculated, and age the sum of z-score for four
fitness tests was used as a PFI. Differences in PFI between BMI categories within each sex-specific half-year age group were compared with ANOVA with Bonferroni adjustment. Sex-specific regressions of PFI on BMI, using a nonlinear quadratic model, were done in four broader age categories. Relationships between BMI and PFI are very with age from late childhood through adolescence. With increasing age during adolescence, the relationship becomes parabolic, and then girls. Conclusion-PFI declines in a curvilinear manner with increasing BMI among youth 9-18 yrs of age, but the slope of the relationship varies with age

Habibzadeh,(2010). Effect of aerobic exercise on some of selected metabolic syndrome in young obese women. There is evidence that obesity in youth is a more powerful predictor of this risk than metabolic syndrome in adult thud. The purpose of the present study is to examine the effect of working exercise in order to reduce some of selected metabolic syndrome in sedentary obese girls. 20 untrained obese (BMI>30) girls 19-25 years volunteer took place in this research and then they were randomly divided in two groups (control: n=10, experimental: n=10). At first and after 2 months all component of body composition, total

Cerizza, et.al.(2007). Overweight and obesity in a sample of young soccer players undergoing the first pre participation physical examination. Nowadays, there is an increasing awareness about the prevalence of overweight and obesity among young people in industrialized countries. During the first pre participation physical examination we measure the BMI of 238 male soccer players (mean age, 1.85+ 0.66 years). The mean BMI was 19.36+3.01 kg/m² considering the total of the athletes included, 74(31%) had a BMI >20.55(cut-off value for overweight at the age of 11 years), while 9(3.78%) had a BMI >25.10 (cut-off for obesity at the age of 11years). Stratifying the subjects by age, 72(26.3%) of the 11 year-old boys (129), 24% were overweight while 4 (12.9%) were obese. In 13 year-old boys (37), 32.4% were overweight and 1 (8.3%) was obese. In conclusion, our data confirm the prevalence of overweight and obesity even in a group of active young soccer player boys and conform also the importance of the pre participation physical evaluation in detecting risk factors potentially linked to severe diseases in adult life.