

SPECIFIC FEATURES OF THE DAILY ROUTINE OF FEMALE TRACK AND FIELD ATHLETES**Abdullayeva O'g'ilo'y Yakubovna,**Assistant, Department of Communal and Occupational Hygiene,
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Abstract: This article describes the daily routine of female track and field athletes, including training sessions, rational nutrition, rest schedule, and sleep regimen, as well as sanitary and hygienic rules. It emphasizes the importance of following these elements according to a well-structured plan. The purpose and significance of a properly organized daily routine are discussed, along with the factors that should be considered when designing it. The article also highlights the beneficial aspects of such a routine for female athletes. Furthermore, it explains that failure to follow a proper daily regimen may disrupt normal physiological processes in the body, which can negatively affect both health status and sports performance.

Keywords: track and field physical training, rational nutrition, active recovery, quality sleep, hydration, dehydration, hyperhydration.

Introduction:

After gaining independence, in addition to all other sectors, significant attention has been paid in our republic to physical education and sports, as well as to the health of the population, the promotion of a healthy lifestyle, and public health improvement. A number of laws, decrees, and resolutions related to physical education and sports have been adopted [1,2,3].

In Ibn Sina's work "The Canon of Medicine", the entire second section of the third volume, consisting of 17 chapters, is devoted to the effective use of physical exercises in maintaining human health. From the very first lines of this section, it is emphasized that engaging in physical exercise, following proper nutrition after training, and maintaining a regulated sleep pattern are essential conditions for preserving health and achieving comprehensive physical development [4].

Aim:

When designing a daily routine, it should be structured in accordance with climatic conditions, season, physiological characteristics of the organism, and physical workload. It must also take into account age, type of sport, level of physical fitness, and biological rhythms.

For girls engaged in track and field athletics, a properly organized daily routine is of great importance in maintaining health, ensuring correct physical development, and improving sports performance.

The importance of a properly organized daily routine includes: ensuring adaptation to physical loads, increasing training efficiency, reducing fatigue, and strengthening health.

The daily routine begins with morning activities.

1. The day of female athletes usually starts with early waking (06:00–06:30), which helps regulate the body's biological rhythm. It is followed by drinking one glass of warm water, light morning exercises, and breathing exercises (5–10 minutes).

2. Morning training (06:30–07:15) is very important for athletes and includes light jogging (10–15 minutes), stretching exercises, and general physical preparation as well as speed exercises. These morning activities activate the body, improve blood circulation, and prepare the muscles for activity throughout the day. After this, hygienic procedures (07:15–07:30) are performed (washing, showering, personal hygiene), followed by a nutritious breakfast.

3. Breakfast (07:30–08:00) should be energy-rich and nutritious, as it serves as the main energy source for daily physical activity. Recommended foods include milk, eggs, meat, cereals (buckwheat, oats), omelet, bread, and honey.

4. Study or daily activities (08:30–13:00): Female athletes combine sports with education. School or university classes and homework play an important role in the daily schedule. During mental activity, heavy physical loads are not recommended, but prolonged inactivity is also harmful. Therefore, short breaks, outdoor walking, light physical activity, and exposure to sunlight are recommended.

5. During this period (10:00–10:30), time is allocated for a second breakfast: yogurt and fruits, dried fruits, or fruit salad are recommended.

6. Lunch (13:00–14:00) is essential for athletes and should be balanced. It may include meat or fish, vegetables, rice, buckwheat or pasta, and dishes such as soups, rice with meat, salads, lagman, mastava with buckwheat, borscht, light pilaf, dimlama, pasta, compote, or juice.

7. Rest (14:00–15:30): 1–1.5 hours of rest is recommended, sometimes including a short nap (30–40 minutes). This helps muscle recovery.

The main part of the daily schedule is dedicated to sports training.

8. The main training session takes place in the second half of the day (16:00–18:00) and usually lasts 1.5–2 hours, conducted once or twice a day. During this time (16:40–17:00), a light snack is also taken. Children and adolescents are recommended to engage in at least 60 minutes of moderate to high-intensity physical activity daily [20,7].

Training Session Structure:

The training process consists of the following parts:

1. Preparatory part (warm-up exercises – razminka):

This stage prepares the muscles for the main workload and usually lasts 15–20 minutes. It includes light running, joint mobility exercises, and dynamic stretching to increase body temperature and activate the cardiovascular system.

2. Main part:

This is the core of the training session and includes special running, jumping, throwing, speed and endurance exercises, technical drills, sprinting, and long-distance running. These exercises strengthen the cardiovascular system, develop muscles and bones, and improve overall physical endurance. It is recommended to perform strength and bone-strengthening exercises at least three times a week. Such training improves athletes' physical fitness and reduces the risk of injuries.

3. Final part (cool-down – “cool down”):

This stage is aimed at recovery of the organism and includes slow jogging and stretching exercises to gradually return the body to a resting state.

Table 1. Training stages of sports reserve preparation in sports schools [5]

No	Training stage	Age	Academic year	Weekly training load (academic hours)
1	Sports and health group	8–9	Entire period	6
2	Initial training group	9–10	1 year	6
		10–11	More than 1 year	8
3	Training group	11–12	1 year	12
		12–13	2 years	14
		13–14	3 years	18
		14–15	More than 3 years	20
4	Sports excellence	15–16	1 year	24

No	Training stage	Age	Academic year	Weekly training load (academic hours)
	group			
		16–17	2 years	26
		17–18	More than 2 years	28
5	Higher sports mastery group	18–19	Entire period	32

Additional Notes and Daily Routine Completion

Training sessions are calculated in academic hours – 1 academic hour equals 45 minutes.

1. In special cases, athletes who successfully pass control tests and have appropriate physical development, anthropometric characteristics, and medical conclusions may be transferred to the next stage of training.

2. The minimum age standards indicated in the table are advisory in nature. Based on medical conclusions and considering children's physical development and anthropometric characteristics, they may be admitted to sports and health groups at an earlier age.

3. The maximum age for training in sports schools and specialized sports schools is 30 years.

4. The maximum age for participation in higher sports mastery groups and the Republican Higher Sports Mastery School does not apply to athletes included in the main and reserve squads of national teams of Uzbekistan, as well as those who have successfully passed control tests in higher sports mastery groups [5].

Training programs include the following preparation sections: physical training (general physical training, special physical training, technical-tactical training), theoretical preparation, psychological preparation, control tests, control matches (competitions), refereeing and coaching practice, participation in competitions, recovery measures, and medical examinations. Among these, control tests and medical examinations are conducted outside the scheduled training hours, while refereeing practice and recovery activities are not included at the sports-health and initial training stages [5].

9. Active rest and recovery (18:00–18:30):

After training, rest is necessary for recovery. Short daytime rest, walking in fresh air, massage, and light stretching exercises help muscle recovery.

10. Dinner (18:30–19:00):

Dinner should be light. Recommended foods include vegetable dishes, chicken, fish, salads, kefir, or yogurt. A second light evening meal is also recommended for children and adolescents [9], especially before sleep.

11. Active rest and preparation (20:00–21:00):

Includes light walking, gentle physical exercises, homework, and reading.

12. Sleep regimen (21:30–22:00):

Quality sleep is very important for female athletes. Experts recommend at least 8–9 hours of sleep per day. Sleep ensures full recovery of the body and provides energy for the next training sessions. During night sleep, hormones such as somatotropin (growth and development hormone) and melatonin (sleep hormone) are actively produced. Proper sleep supports normal menstrual cycles, faster recovery from injuries, improved training efficiency, and better concentration and reaction speed.

Lack of sufficient sleep leads to fatigue, weakness, reduced concentration, decreased immunity, slower recovery from injuries, and lower sports performance.

Specific Features of Nutrition in the Daily Routine of Female Track and Field Athletes

Nutrition that meets the physiological needs of student-athletes according to age and type of sport, ensures high working capacity, increases the body's resistance to adverse environmental

factors, promotes faster recovery from injuries, and contributes to prolonging athletes' lifespan is called **rational nutrition**.

To ensure proper organization of rational nutrition for female student-athletes, the dietary intake must meet the following main hygienic requirements (based on Sanitary Rules and Norms No. 0052-23):

- The daily caloric intake must correspond to the athlete's energy expenditure;
- The chemical composition, caloric value, and volume of the diet must correspond to the physiological needs and characteristics of student-athletes, considering sport type and training period (adequate nutrition);
- The diet must be balanced in proteins, fats, and carbohydrates, with proportions adjusted according to sport type and training intensity (balanced nutrition);
- The daily diet must include a wide variety of plant and animal products (diversity);
- Food must be safe and free from harmful substances;
- Daily caloric and nutrient requirements for each track and field discipline should be defined according to Table 4;
- To ensure variety, the menu should be planned for 10–15 days, considering sport type, training schedule, and duration;
- Food combinations must be considered when preparing the menu (e.g., better protein absorption with vegetables), as well as digestibility and eating patterns at school and home;
- If a product is unavailable, it should be replaced with an alternative of equal nutritional and biological value;
- The daily diet must include meat, fish, poultry, milk and dairy products, eggs, grains and legumes, fresh fruits and berries, vegetables, plant oils and butter, bread, and juices;
- To improve nutrient absorption and enrich the diet with vitamins, minerals, and unsaturated fatty acids, fresh vegetables, fruits, berries, salads, and juices should be used;
- Food processing methods, digestion time in the stomach, intestinal transit, and absorption processes must be considered;
- Food must have high organoleptic qualities;
- Breakfast should include fiber-rich foods that stimulate gastrointestinal motility;
- In sports-educational institutions, meals rich in animal protein should be provided in the first half of the day;
- After high-intensity training, the caloric value of the first and second breakfasts may increase up to 30% of the total daily intake;
- The distribution of daily nutrition depends on sport type and training duration;
- If intensive training is held in the morning, the first breakfast should be high in calories (up to 30% of daily intake), small in volume, easily digestible, and should avoid foods rich in fats and fiber;
- It is recommended to include meat, sausages, cheese, cocoa or coffee, and vegetables (potatoes, tomatoes, carrots, green onions, onions) in the first breakfast;
- Lunch should account for 35–40% of the total daily caloric intake and include animal proteins, carbohydrates, fats, fiber-rich foods, grains, and legumes;
- If main training or competitions take place after lunch, the lunch should be light and easily digestible, while fiber-rich and slow-digesting foods should be moved to breakfast; in this case, lunch calories may be reduced to 30%, with compensation in breakfast and dinner;
- The second snack should provide 5–10% of daily caloric intake;
- Dinner should contain less protein and fat compared to breakfast and lunch;
- Dinner should include easily digestible foods such as dairy products, vegetables, fish, and fruits;
- To ensure quality sleep, dinner should be taken 3–4 hours before bedtime;
- After dinner (before sleep), a second light evening meal is recommended, consisting of fermented milk products, fruits, and vegetables, providing 5–10% of daily calories;

- National dietary traditions should also be considered;
- The diet, water intake, and food composition for student-athletes are determined by coaches, dietitians, and sports physicians of sports-educational institutions.

Nutrition regimen. During the training period, the nutrient ratio is: protein : fat : carbohydrates = 1 : (0.8–0.9) : (3.5–4.5). In winter sports, fat is not significantly reduced: the ratio is 1 : 1 : (3.5–4.7). The daily diet should be as follows: 1. Per day (6 meals in sports schools), in sports colleges and higher education institutions 5 meals per day are recommended; 2. The interval between meals should not exceed 5 hours and should not be less than 2.5–3.5 hours; 3. Training sessions are not conducted on an empty stomach; 4. Food before competition is eaten 2–3.5 hours before; 5. Food after training is eaten at least 40–60 minutes after.

Daily nutrition schedule of student-athletes (Table 2)

(Based on Sanitary Rules and Norms 0052-23: Hygienic requirements for nutrition of student-athletes in sports-educational institutions) [9]

Meals for student-athletes are organized according to age (7–10, 11–13, 14–15 years) and school shifts (1st shift – lessons start at 8:00; 2nd shift – lessons start at 13:00).

1. **Breakfast:** 7:15–7:30 for all age groups in both shifts.
2. **Second breakfast:** for 1st shift – 10:35–10:45 (7–10, 11–13, 14–15 years); for 2nd shift – 10:15–10:25 (all age groups).
3. **Lunch:** for 1st shift – 7–10 years: 12:30–13:00; 11–13 and 14–15 years: 14:00–14:30. For 2nd shift – all age groups: 12:00–12:30.
4. **Afternoon snack (tolmachoy / poldnik):** for 1st shift – 7–10 years: 16:00–16:10; 11–13 and 14–15 years: 16:30–16:40. For 2nd shift – all age groups: 16:00–16:10.
5. **Dinner:** for 1st shift – 7–10 years: 19:00–19:15; 11–13 and 14–15 years: 19:30–19:45. For 2nd shift – 7–10 years: 19:00–19:15; 11–13 and 14–15 years: 19:30–19:45.
6. **Second dinner:** for 1st shift – 7–10 years: 20:15–20:20; 11–13 and 14–15 years: 20:45–20:50. For 2nd shift – same times: 20:15–20:20 and 20:45–20:50 depending on age group.

Daily energy distribution (Table 3)

(If training sessions are held in the second half of the day: based on Based on Sanitary Rules and Norms. 0126-01) [8]

1. Breakfast: 7:30–8:00 — 20–25%
2. Second breakfast: 10:00–10:30 — 10–15%
3. Lunch: 13:00–13:30 — 30–35%
4. Afternoon snack (tolmachoy): 17:00 — 5–10%
5. Dinner: 18:30–19:00 — 25–30%

Daily caloric and nutrient requirements for female student-athletes in track and field (Table 4)

(Based on Sanitary Rules and Norms No. 0052-23) [9]

For cyclic sports (endurance-oriented): running (ultra-long, long and middle distance), race walking

Age 7–10: 3100 kcal; protein 115 g (animal protein 65 g); fats 90 g (animal fats 20 g); carbohydrates 450 g

Age 11–13: 3400 kcal; protein 125 g (animal protein 74 g); fats 100 g (animal fats 20 g); carbohydrates 499 g

Age 14–15: 3750 kcal; protein 117 g (animal protein 69 g); fats 100 g (animal fats 26 g); carbohydrates 445 g

For acyclic sports (speed-strength oriented): track and field (hurdles, long jump, pole vault, shot put, javelin throw, decathlon), sprint running (short distances)

Age 7–10: 2585 kcal; protein 95 g (animal protein 57 g); fats 91 g (animal fats 17 g); carbohydrates 385 g

Age 11–13: 2700 kcal; protein 100 g (animal protein 60 g); fats 80 g (animal fats 19 g); carbohydrates 390 g

Age 14–15: 3100 kcal; protein 115 g (animal protein 65 g); fats 90 g (animal fats 20 g); carbohydrates 450 g

Female athletes' nutrition is adapted to their hormonal characteristics and is primarily aimed at energy supply and recovery. Girls should avoid excessive low-calorie diets, as energy deficiency can lead to disruption of the menstrual cycle and weakening of bones (osteoporosis). The diet should include protein-rich foods such as meat, milk, fish, and eggs; carbohydrates such as grains and fruits; and vitamins and minerals from vegetables and leafy greens. In addition, plant oils are an important part of the diet, ensuring that at least 30% of total fat intake comes from vegetable oils. Healthy fats such as avocado, olive oil, and nuts are essential for the hormonal system.

Energy balance and carbohydrates are especially important, as track and field events (running, jumping, throwing) require high energy expenditure. Complex carbohydrates should make up 50–60% of the daily diet, including oats, brown rice, pasta, and whole grain bread. According to SanQvaM 0126-01, bread products provide up to 80% of plant proteins and are a major source of carbohydrates (up to 50%). Carbohydrate intake before and after training helps restore muscle glycogen, which is the main energy source.

Protein is essential for muscle recovery, and for girls the recommended intake is 1.2 to 1.7 grams per kilogram of body weight. Sources include chicken, turkey, fish, eggs, cottage cheese, and legumes such as beans and peas. It is important to consume protein within 30–60 minutes after training to accelerate muscle fiber recovery.

Vitamins and minerals are also crucial. Although they do not significantly contribute to energy needs, they regulate metabolism and support internal balance. Important sources include vegetables, fruits, dairy products, and mineral water. Female athletes require increased intake of vitamins A, B1, B2, B6, PP, C, and E, with vitamin B1 and C needs doubled.

Iron is particularly important because female athletes are prone to anemia due to intensive training and physiological processes; therefore, red meat, liver, spinach, and pomegranate are recommended. Calcium, phosphorus, and vitamin D are necessary for bone strength and injury prevention, especially in jumping and running sports. Iodine improves endurance, reduces fatigue, and supports recovery; its sources include iodized salt, seaweed, milk, eggs, and fish.

Hydration is essential because dehydration can reduce performance by 10–20%. During training, water should be consumed in small sips every 15–20 minutes. For long-distance athletes, electrolyte drinks (isotonics) are recommended. In Uzbekistan's hot climate, maintaining water balance is extremely important. Student-athletes should drink 400–500 ml of water 40–60 minutes before training, and during training or competition fluid should be consumed in small portions (30–60 ml each). Daily fluid intake should be around 2.5–3 liters. After training, natural water, mineral water, fruit juices, vegetable juices, tea, milk, and fresh fruits are allowed, while excessive intake and hyperhydration must be avoided.

Sanitation and hygiene rules are also important. Female athletes must take a shower after each training session, wear breathable natural fabrics, and use footwear adapted to foot anatomy. Training areas must be clean, well-ventilated, and regularly disinfected. Psychological hygiene includes stress management and maintaining motivation. Medical monitoring is conducted twice a year, including anthropometric measurements and blood tests to prevent anemia. Training in natural environments and exposure to fresh air are also important.

Certain restrictions are required in the daily routine. Sedentary behavior, excessive use of mobile phones, gadgets, and television should be limited. Fast food, spicy and salty foods, and monotonous diets are not allowed. Foods causing bloating, carbonated drinks, energy drinks, and high-sugar beverages are also prohibited. Very hot or very cold foods should be avoided, and heavy meals before sleep are not recommended.

Conclusion

In conclusion, a daily routine based on sports hygiene principles preserves the health of female track and field athletes and ensures their proper physical development. Proper organization of training, balanced nutrition, sufficient rest, and quality sleep—i.e., a well-structured daily routine—help female athletes achieve high results and develop comprehensively.

The daily routine of female track and field athletes is designed in accordance with physiological characteristics of the body and physical workload demands. Failure to follow the daily regimen or improper planning can lead to setbacks not only in overall development but also in physical growth and sports performance. Immunity decreases, injuries become more frequent, hormonal imbalance and stress increase, making it difficult to achieve expected results.

Regular physical activity, adherence to a structured daily schedule, and consistent participation in training sessions help prevent an increase in cortisol (the stress hormone). Therefore, female athletes become healthy, beautiful, mentally and physically resilient, and strong.

I would like to conclude my work with the words of the famous sports figure Pierre de Coubertin about running:

“If you want to be healthy—run; if you want to be beautiful—run; if you want to be strong—run.”

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