

Sports And Performance Nutrition

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Lecture-36: Sports nutrition in Indian context

A warm hello to all the listeners. In this lecture, we are going to be discussing sports nutrition and high performance in the Indian setting. Now, how to simplify the western scientific jargon to the cultural context in the Indian setting keeping to our traditional practices. What can be the factors that influence diet planning for an Indian athlete? What is the difference between the nutritionist and the dietitian other than the academic qualification? What can be the complementary competencies of a dietitian and how to check compliance and offer feedback to athletes? Let us understand more. A sports nutritionist and a sports dietitian is a very important integral part of the sports science team. With over 20 years of work, I am happy to say dietitians and nutritionists are finally coming to the fore where the nutrition advice is being offered by us.

In bridging this conversation as the whole sports science team, sports dietitians and nutritionists can strengthen performance for an athlete and even for those individuals who are into fitness and exercise regularly as a practicing individual, we can offer support for their overall well-being. If you recollect the introductory chapter where I talked about how a sports nutritionist or a sports dietitian simplifies the nutrition strategies to improve exercise or athletic performance. Like one of the most important things our director of International Olympic Committee sports nutrition, Miss Louise Bork said, the pillars of meal planning is depicted in this slide to plan based on scientific guidelines, to tailor it to the individual need, to use evidence-based practices and to personalize it to that individual keeping it practical and pragmatic and allowing enough liberty and space for these to be practiced on a day to day basis can help the outcomes of a dietary counseling. There are several parameters that can influence the diet planning for an individual.

Most importantly for an Indian athlete, since a lot of our research references come from the western world to correlate that to our setting, to our culture and traditional eating practices requires small little manipulations. Every athlete has a different need and we need to keep that in mind and most importantly the costs involved as sports is expensive not only talking of the infrastructure and the sports gear but to have the other sports science professionals or support staff and there is a bunch of them who work for one single athlete, the cost of a sporting career can be exorbitant. So keeping the food options and also the supplement protocol in the view of the available budgets can be very important. The health status of the athlete or the sports person can be very important in determining how we plan the meals. Nutritional deficiencies requires certain nutrients that need to be beefed up and if the levels are very low which are evaluated after a blood test then nutritional supplementation becomes mandatory and we have learnt about this in the fundamentals of sports nutrition.

At all given time the meal plans should suit the training load and the training cycle for that individual athlete. It is a given that when the athlete is in a peak season and is in a tournament or a competition cycle the supplement need and also the intake of food can be larger. So these are some of the factors we keep in mind when we plan meals for athletes. The demographics and the region an individual represents or comes from is a very important aspect that determines the food culture of that individual or the athlete. For example from where I come in Bangalore in South India Ragi and Millets are a very integral part of our daily diets.

Be it the Ragi Mudde or the Jola the roti or the Jova rotis are quite indigenous to this region and culture. So if I had to tell a South Indian to forsake the idli dosa or the Ragi Mudde it can be very challenging and similarly if I impose that particular dish to an athlete who is coming from North India who is used to eating his rice and roti it can be quite cumbersome for that athlete to adapt. So keeping that in mind as an inclusion criteria can help tailor or personalize the diet pattern. And if you are dealing with young athletes as teenagers for that matter even young athletes or a master athlete you will notice in the interview schedule where we discussed the detailed requirement of the meal over the training week some individuals are very particular about the likes and sometimes have very strong dislikes and if the individual is allergic to a specific food ingredient which can trigger an allergy reaction or a histamine reaction which can be life threatening that can be dangerous. Just in the previous chapter we have learnt in detail about the food intolerance and that becomes a medical requirement where certain inclusions and exclusions of food choices is imperative. One interesting thing is the diverse food habits of just that one single individual athlete itself.

It is interesting to note that several of our Indian athletes will have several vegetarian days strictly followed through the week and that is something which is in a very religious or a cultural context and of course if you are a vegetarian by choice or due to a family setting by default your food needs to be calculated to meet a certain amount per meal and also the recommended allowance for one full day. An athlete who consumes non-vegetarian on a certain day can easily meet the target of 20 or 25 grams of protein just by eating a chunk of a chicken breast which could roughly be about 100-150 grams and if you recollect the chapter on the fundamentals or the basics of protein you will remember the pictorial depiction that I taught you need to eat 3 katoris of dals or choli or perhaps even more to meet the same requirement of 20 odd grams of protein. So you can imagine how for that single athlete his food intake can change based on his vegetarian or his non-vegetarian days of the week and again one important aspect that can impact the way we plan meals is also the body composition goals. They want to eat their overweight, they want to lower their fat mass, lowering the calorie intake helps meet their physique transformation goals. Age and gender are equally an important aspect that can be the parameter to choose calories.

The training load and the season in which the athlete is in can be a very very important aspect that governs the entire meal program. At all given time as the support staff and a part of the sports science team, the sports dietician and a nutritionist should at all times practice evidence based approaches in meal planning. So if the western world has published a research paper on the importance of tart cherries that can improve recovery and prevent delayed onset muscle soreness, how can we change that to the Indian setting? So we have to offer cost effective indigenous simple options in the Indian setting. For example tart cherries can be replaced by

pomegranates which also have a powerful pigment called anthocyanin that can offer similar benefits. Even beetroot can be a very reasonable option to help lower Dorms.

So we need to keep the alternatives and options available at all times and help athletes adapt to these scientific guidelines. I would like to talk about the three pillars of dietary counseling here to keep options simple and practical, giving alternatives of Indian foods, to be able to allow athletes to practice that to suit their individual needs and to have the patience and support and handhold these athletes to track the progress. So as practicing sports dieticians we can assist athletes and active individuals achieve their goals with this three pillar approach. I would like to take a moment in discussing what are the attributes that can make a dietician stand out from a nutritionist. Some of you could have heard this before and I would like to discuss this here for you to understand the difference between a sports dietician and a sports nutritionist.

It is very important for athletes to take the advice from qualified sports dieticians and sports nutritionists. A dietician is a professional who typically has about five years of academic qualification by studying undergraduate and postgraduate degrees in nutrition and dietetics. This course typically also equips them to work in a clinical setting or a hospital where they are trained for medical nutrition therapy. They can also register themselves by writing an exam which gives them a registration number and for which they also have to mandatorily clear certain hospital training. So that gives a sports dietician an extra edge to come from the background of dietetics and further pursue the interest in sports nutrition.

A nutritionist may not necessarily have a postgraduate degree in nutrition and many times they may pursue shorter duration of a course but not necessarily be affiliated to a body or have a formal accreditation. So a nutritionist is somebody who could give you general guidelines on healthy eating practices with a specialization in sports nutrition. A nutritionist also can offer scientific guidelines to active individuals and athletes. So we understand an academic qualification can be an important aspect when you choose the right sports science professional you would like to work with and take guidance from especially when it comes to your body, your well-being and definitely when you want to use supplements be it nutritional or medicinal and sports specific supplements. So other than the academic qualification what else can be the competencies of an accomplished sports dietician or a sports nutritionist.

Soft skills go a long way in augmenting a career when you work with individuals. A pleasing personality, gestures and the right posture to body language can send out several vibes which can help build the rapport in counseling. Dietary counseling can be a very lengthy and laborious process which is ongoing where you are building the relationship with the athlete. I have been very fortunate that I have worked with a few athletes and their family members over the years sometimes even 4 and 5. Professional development and improving your skills is definitely an ongoing process.

What important competency is listening? Hearing the concerns and grievance of an athlete can be very comforting for the athlete where one feels being heard and many times you can also just be a sounding board. One way to complement listening is also to repeat what the client or the athlete has said in your own words which is paraphrasing so you have perceived the conversation right. In the dietary counseling gestures can have a very important meaning, an empathetic nod, an occasional smile can be very useful to keep the conversation interactive. Also to have an eye contact when you have a conversation with the client can reaffirm that

they have your attention and your listening. The demeanor and the body language or the poise can have a profound impact on how the trajectory of the conversation goes.

So from grooming to the attire and having a pleasant personality can be definitely a value addition for a dietician. To be able to do an effective compliance check can be a crucial role that a sports dietician can play. Offering a meal plan is only one vertical of the collaboration. How far and how effectively the athlete or the individual is able to adapt to the meal plan is a totally different aspect. Food is dynamic and as I have always said nobody can eat by the timetable to the tea.

A flexible approach where you empower the athlete with the education to choose between the food groups and make swaps and choose alternatives to meet the needs can be important to sustain the practice. For example if a large bowl of 300 grams of rice is not available you can roughly eat about 3 chapatis to meet the same requirements. If you are unable to eat 2 to 3 eggs you will have to still compensate that by eating a large bowl of dal to provide you similar amount of protein. So to have a conversation on how far the athlete is able to follow this meal suggestion without making this sound like an interrogation is definitely a skill. So how can sports nutritionist and dietician check for food compliance? You can request for food recalls but this again requires a lengthy process of writing down.

Similarly food diaries or journals can be maintained if the athlete has the patience and the time and in my practice this is not everybody's cup of tea and many athletes do not like documentation and thanks to smartphones and WhatsApp it is easy to share plated meals as photos and that can become also a good way to scan the food groups and the nutrient consumption and in follow-ups and in counselling sessions or even over a phone call to have a meaningful discussion and to probe and ask questions which can help you get some answers to the consumption of the meal can help you check for meal compliance. So offering a diet chart and following up assisting and hand holding for compliance is a crucial competency for a dietician. Another important aspect is to offer the feedback or the outcomes of these checks. So dieticians and nutritionists can make this process easy for the athlete by giving very clear instructions which can be understood. For example in my practice from mothers I hear a feedback an athlete is averse to either a fruit or a vegetable consumption.

We know that you may want to consume about 2 to 3 seasonal fruits each day for your healthy living. Now if an athlete or a young child is not particularly tuned to consuming the fruit can we offer the fruit as a smoothie, can we include that in a salad, can we make a milkshake or even offer it as a juice. Similarly if an athlete does not like to consume a particular vegetable we can offer an alternative. If beetroot juice for nitrates is not enjoyed can we use lettuce, radish or arugula in sandwiches and wraps. If an athlete does not like to eat a katori of sabzi can we puree the spinach and need a chapati atta and offer rotis with vegetable puree or if we make a pasta can we make it with tomato or a sauce made of bell peppers.

So to be able to keep the communication very clear and crisp and concise and to have an open mind for a dialogue, to hear their concerns and continue the conversation can be very very helpful for better outcomes. Now often feedback I often come across when an athlete is on a very strict diet regime in the peak season or when a client wants to attain a certain physique transformation and is looking at weight cutting or wants to lower their fat mass. So the first thing that as a dietician we need to keep in mind when we offer feedback is to be non-judgmental and to help them realign their focus to say that allowing flexibility of 10 to 20

percent in their approach to adapting to the suggestions of the meal plan is okay. What they follow consistently over a few days of the week and perhaps even to a larger extent of a lion's share of the suggestion is what is more important. So as dieticians and support staff for us to be compassionate, empathetic and objective without judging their behaviour can be supportive to help them meet their objectives and athletic goals.

Also to summarise simplifying all the science for our Indian culture and traditional food habits can help bridge science to the actual practicalities to have a flexible approach and help clients and athletes adapt to suggestions gradually along with helping them with the knowledge and the education as to what these suggestions bring to them and add value is what is important. A dietician must definitely practice science based approaches in addition to having evidence based practice to develop certain core competencies. Sports dieticians and sports nutritionists can offer support to their clients and individuals which can go a long way in helping those individuals reach their health and fitness goals. Thank you for your patience and listening.

Thank you.

So I was the next is eat more of salads, rich protein, food, drink water and exercise being an athlete and more of protein, tofu, chicken and exercise a lot. Hi, Nana Lakshkari. I'm a national level 400 meter hurdles athlete. So now then 10 years in the practice start my degree, but I have to know nutrition. So when I now be a burger, get them contact my degree.

I'm going to the nutrition. So what do we do? No, it's not though 42 kg. I'm not sure. I'm not sure.