

16<sup>th</sup> International Conference and Exhibition on

# OBESITY & WEIGHT MANAGEMENT

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### Plant based diets and performance

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Vegan or plant based diets have continued to rise in recent years among the general public and fitness community. However little is known or discussed on how this can affect physical fitness. Nutritional organizations worldwide have supported the adoption of a vegan diet to improve health. However, most of these groups place special emphasis ensuring the diet is well-planned in order to avoid potential nutrient deficiencies. Joint statements by nutritional and sports medicine organizations have concluded that physically active individuals have special nutritional needs and considerations when compared to a sedentary population. While specific research on a vegan diet's (not vegetarian) impact on performance is limited, there is a great deal that does point to the potential for a well-planned vegan diet to improve physical fitness. However there could be negative performance and or health consequences by ignoring nutritional recommendation for specific activities. The purpose of this presentation is to highlight the health and performance benefits of adopting a plant based diet and present considerations for physically active individuals to avoid possible pitfalls in their fitness training. Individuals following a plant based diet tend to be lower in total calories, fat, protein (also lower in essential amino acids), omega-3 fatty acids, vitamin B12, iron, vitamin D, calcium, creatine, carnosine and zinc compared to those following an omnivorous diet. Most if not all of these macro and micronutrients are also of special concern to physically active individuals. For both aerobic and anaerobic fitness goals it is discouraged to have fat intake <20% of energy intake. For anaerobic fitness goals aiming for 1.2-2 g/kg/bw. Vegan athletes should seek leucine rich protein sources to ensure optimal muscle protein synthesis. For individuals who do more aerobic high caloric cost exercise, ensuring sufficient energy intake is important. A well-planned plant based diet has the potential to increase health and improve physical fitness. To ensure a healthy adherence to both requires special health education by fitness professionals.

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