Fasting and exercise: the benefits and the drawbacks

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Fasting is often practiced by athletes and non-athletes as a means (among others) to control body weight and augment training adaptations. This presentation will cover some of the basic physiology of fasting, such as the timecourses of changes in metabolism in response to fasting. The evidence surrounding the benefits and drawbacks of fasting for athletes and non-athletes will then be discussed, such as the potential to augment skeletal muscle signalling related to endurance training adaptations that are involved in exercise performance and cardiometabolic health. By understanding the potential mechanisms by which skeletal muscle signalling is regulated, then it may be possible to employ other strategies that harness the benefits of fasting without the drawbacks (i.e. fasting mimetics). Some of the evidence on fasting mimetics will therefore also be introduced.