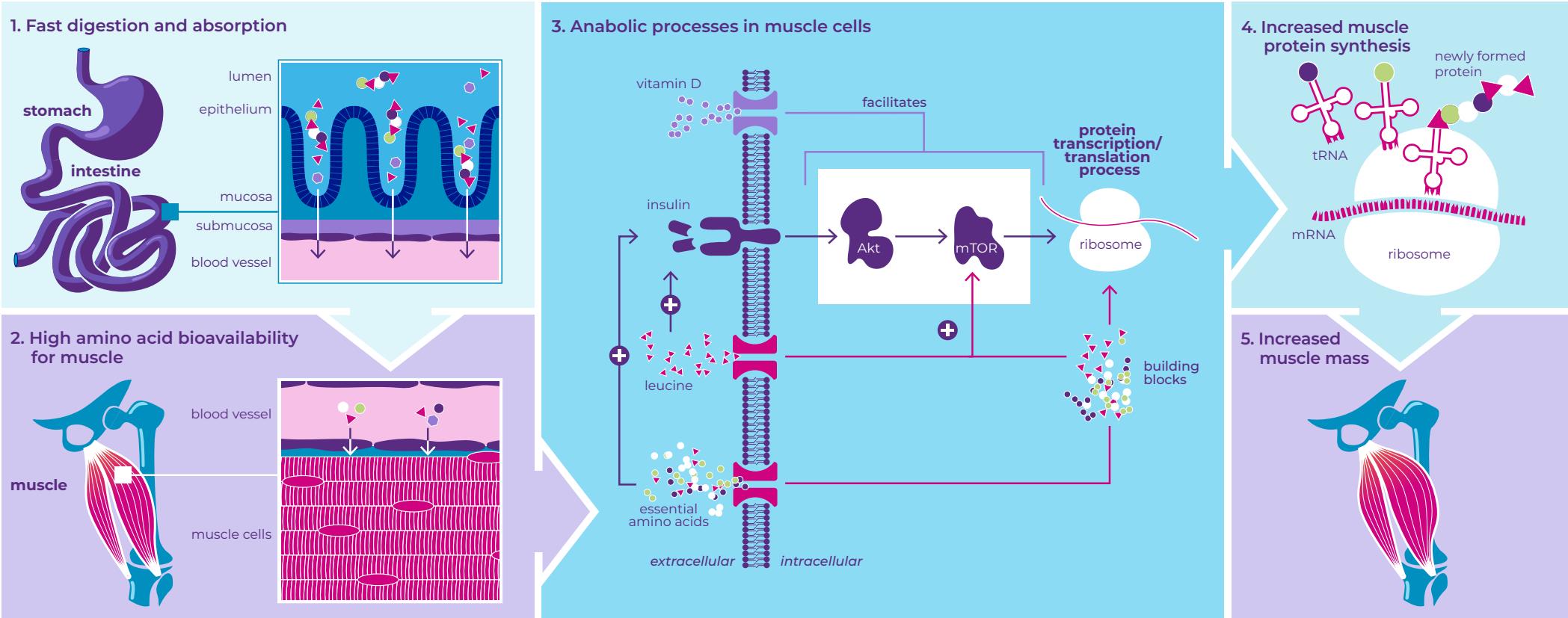


Anabolic mode of action of the muscle building nutrients whey protein, leucine, vitamin D



Legends:

muscle building nutrients							
whey proteins	essential amino acids	vitamin D	leucine	insulin	insulin receptor	transport channels	stimulating effect

Anthony JC, et al. J Nutr. 2000;130(10):2413-9. Bauer JM, et al. J Am Med Dir Assoc. 2015;16(9):740-7. Boirie Y, et al. Curr Opin Clin Nutr Metab Care. 2018;21(1):37-41. Boirie Y, et al. Proc Natl Acad Sci USA. 1997;94(26):14930-14935. Chanet A, et al. J Nutr Biochem. 2017;46:30-8. Dangin M, et al. Am J Physiol Endocrinol Metab. 2001;280(2):E340-E348. Domingues-Faria C, et al. Curr Opin Clin Nutr Metab Care. 2017;20(3):169-174. Katsanos CS, et al. Am J Physiol Endocrinol Metab. 2006;291:E381-E387. Luiking YC, et al. Clin Nutr. 2016;35(1):48-58. Pennings B, et al. Am J Clin Nutr. 2011;93(5):997-1005. Salles J, et al. Mol Nutr Food Res. 2013;57(12):2137-46. Van Wijngaarden JP, et al. Clin Nutr. 2017;36:S158-S9.