



营养聚焦：
美国乳蛋白：
助力健康老龄化



衰老是不可避免的。关键是要通过饮食和锻炼来改变生活方式，从而避免许多未来可能出现的健康问题和危害身体的症状。在整个生命期保持肌肉量、力量和身体机能是通往健康老龄化和维持高品质生活的第一步，也是简单的一步。如果不加干预的话，肌肉量、力量和身体机能的下降都可能导致一系列的健康问题：

活动量减少

跌倒风险增加

失去自主性

更大的依赖性

从大约40岁开始，¹人体肌肉量每年普遍减少0.5% - 1%，所以尽早开始行动非常重要。

你知道吗？

像美国乳清蛋白和牛奶蛋白这样优质完全的乳蛋白在健康老龄化的过程中起着重要的作用，它可以帮助人们：

- 将可以导致肌肉衰减的肌肉流失最小化
- 通过高蛋白饮食将健康益处最大化
- 将蛋白质摄入平均地分配到一天里的每一餐中



聚焦

聚焦肌肉衰减征

肌肉衰减征是一种与年龄相关的肌肉量和功能下降的病症。这种渐进过程的特征是年过三十岁之后，人体瘦肌肉量以每十年大约3%到8%的速度减少，这一速率可能会随着个体老龄化而更高。^{2,3,4,5,13}肌肉衰减征可能会影响到20%年龄在60岁和70岁的人，^{6,7}影响到将近50%年龄超过80岁的老人。^{8,9,10}

饮食中蛋白质摄入不足和缺乏锻炼可以使这种情况加剧。但好消息是在休息时或锻炼后摄入蛋白质可以帮助老年人生长新的肌肉。^{11,27}



3–8%

肌肉衰减征可导致三十岁后，
人体瘦肌肉量每十年减少大约
3-8%

20%

有20%的60岁和70岁以上的
老人可能受到肌肉衰减征的
影响

50%

有50%的80岁以上的老人可
能受到肌肉衰减征的影响

在老龄化过程中维持甚至增加肌肉量的三个简单步骤

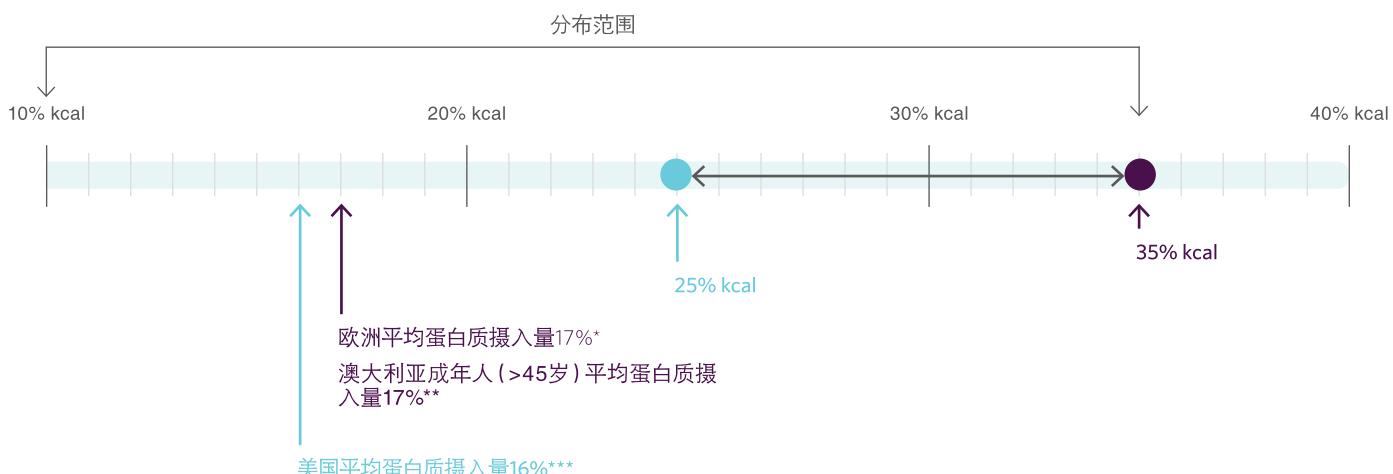
1. 增加高品质蛋白质摄入

高蛋白饮食显示被证明可以帮助人们在老龄化的过程中维持肌肉量。^{1,11,12,13}事实上，对于老龄化群体来说，摄入比美国和国外推荐的^{15,16}（0.8克蛋白质/千克体重）更高数量的蛋白质可能更加适合维持肌肉量。研究表明，在可接受的范围内，摄入更高数量的蛋白质（占总卡路里摄入量的25%到35%，依各国家标准而定^{17,22}）可以更好地帮助老年人维持骨骼和肌肉量，同时满足他们的新陈代谢和生理需求。¹⁸

国际推荐蛋白质摄入值(占总卡路里百分比)

澳大利亚/新西兰 ¹⁹	高达25%
欧盟食品安全局 ²⁰	高达27%
美国 ²¹	10%-35%
世界卫生组织 ²²	高达27%

目前每日蛋白质摄入量占每日卡路里摄入量的14%到17%，因此仍有增长空间。



*European Food Safety Authority Panel on Dietetic Products, Nutrition and Allergies. *Scientific Opinion on Dietary Reference Values for Protein*. EFSA J. 2012;10(2):2557.

**Australian Bureau of Statistics and Department of Health and Aged Care Services. National Nutrition Survey: Nutrient Intakes and Physical Measurements, Australia, 1995.

Canberra: Australian Bureau of Statistics; 1998.

***Dairy Research Institute® citing National Health and Nutrition Examination Survey, 2001-2008.

2.合理分配蛋白质摄入优化效果

人体一次可以吸收的蛋白质有限，所以一定要把它均匀地分配在一天的摄入中。专家建议，每一餐应摄入20-30克的高品质蛋白质。^{11,13,24,25}早餐和零食的蛋白质含量一般较低，所以从早餐和零食抓起是帮助人们实现这一目标的第一步。



平衡一天中的蛋白质摄入可将健康益处最大化

3.增加锻炼量可以带来更多益处

锻炼可以帮助人们减缓老龄化带来的肌肉流失：²⁵建议老年人在抗阻训练后摄入40克蛋白质，可最大化肌肉蛋白质的合成。^{25,27}



力量训练：每周至少两次²⁶

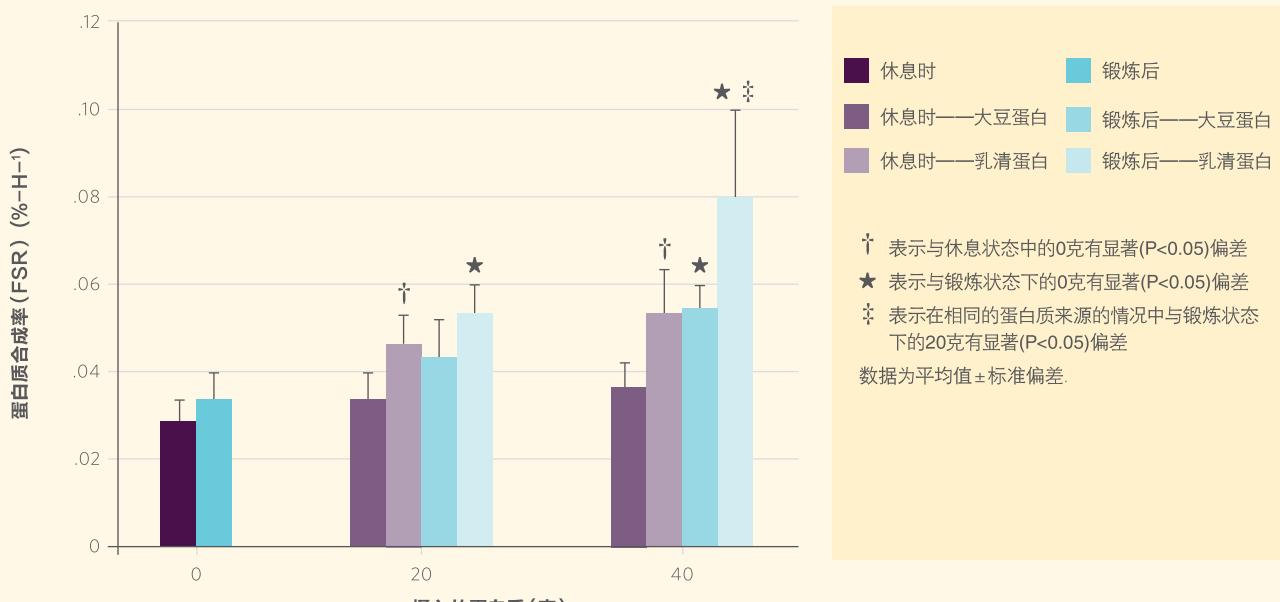


研究发现

高品质蛋白可以促进肌肉蛋白质合成

2012年的一项研究显示，乳清蛋白比大豆蛋白能够更好地促进休息时和抗阻训练后的肌肉蛋白质合成。²⁸

- 30位年老的男性(71 ± 5 岁)完成一轮单边膝伸抗阻训练后不摄入蛋白质(0克)，或分别摄入20克或40克大豆分离蛋白。将结果与之前分别摄入20克和40克乳清分离蛋白的同龄参与者的成绩进行比较。
- 摄入20克和40克大豆蛋白的参与者的肌肉蛋白合成率均低于摄入乳清蛋白的参与者的锻炼过和未锻炼过的腿部肌肉的蛋白合成率。
- 结论：研究人员发现，在休息时摄入20克乳清蛋白，或在抗阻训练后摄入40克乳清蛋白可以将老年人的肌肉蛋白合成效果最大化。



有氧训练：每周至少三天，尽量达到每周2.5小时²⁶

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保持
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想了解更多关于乳蛋白的信息？

虽然美国乳品出口协会不生产也不销售乳制品，但我们全力支持乳制品生产者和销售者。搜索 ThinkUSAdairy.org/Nutrition 了解更多关于美国乳蛋白的健康和营养益处。



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