

Reducing Cancer Risks by Minimizing Substrate Accumulation through Regular Timely Exercise

Abstract

This article delineates a mechanism through which timely regular exercise can reduce cancer risks by minimizing substrate accumulation. It is theorized that any substrate overload by eating more and burning less predisposes cells to oncogenesis. Thus, timely regular exercise is mandatory for maintaining a balance between nutrient supply and use in a variety of cells notably liver and the periphery.

Keywords: Cancer; Substrate; Accumulation; Exercise

Perspective

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Discussion

It is already described how fitting substrate use and provision can affect carcinogenesis [1,2]. The objective of this article is to underline the importance of timely regular exercise in maintaining a healthy balance between substrate supply and use by liver and peripheral cells that minimizes substrate accumulation over the circadian period. For cells to operate normally, ups and downs in substrate supply must be avoided. One practical strategy to maintain regularity with no major substrate accumulation over the circadian period is timely exercise since eating takes place regularly multiple times a day. This ensures that extra nutrient supplies to the body undergo oxidation for securing timely balances in cell dynamics. This is a key reason why daily exercise is necessary, particularly from a cancer perspective [3-8].

Running and evening exercise are examples of effective physical activities that contribute to normalizing cells substrate provision and use [9,10]. These activities are thus considered anti-cancer [9,10]. Physical activities with intense nature ensure that substrate overloads are minimized, thus thereby; cells perform normally under regular smooth substrate supplies. In a nutshell, any major eating occasion needs to be metabolically neutralized by an exercise occasion. However, since time is so short in today's busy times, it is postulated that a minimum of one daily exercise session is required to reduce cancer risks. The longer the exercise intervals, the less effective in benefiting the body and helping to reduce cancer risks. Such a timely regular daily exercise is a pragmatic approach towards structuring a lifestyle that optimizes human health.

Implication

Regular timely (daily) exercise as a pragmatic approach is deemed necessary to minimize substrate buildups in liver and peripheral cells to help minimize cancer risks.

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References

1. Nikkhah A (2016) Fitting Substrate Provision and Use to Minimize Carcinogenesis. *J. Cancer Prev Curr Res* 5(1): 00150.
2. Nikkhah A (2015) Establishing rhythmic regularities in cell physiology: A novel global program to thwart cancer. *J Nutr Health Food Eng* 2(2): 00052.
3. Nikkhah A (2015) Circadian Timing and Regularity of Physical Activity: A Novel Bioprocess to Prevent Devastating Modern Diseases. *J. Bioprocess. Biotechniq* 5: e131.
4. Nikkhah A (2015) Evening Exercise: A Global Strategy to Prevent Central Adiposity and Crdiometabolic Diseases. *Int J Diabetol Vasc Dis Res* 3(6) 113-114.
5. Nikkhah A (2015) Running as a Postmodern Probiotic to Optimize Gut Physiology and Health. *J Prob Health* 3: 1.
6. Nikkhah A (2015) Demolishing Obesity via a Circadian Cutting-Edge Public Science. *J J Obesity* 1(1): 008.
7. Nikkhah A (2015) Nature as an Ideal Rhythm Model for Optimal Cardiovascular physiology and Health. *Int J Diabetol Vasc Dis Res*. 3(2e) 1-2.
8. Nikkhah A (2015) Secure Weight Management via Fitting Circadian Patterns of Physical Activity, Resting and Eating. *Adv Weigh Manag Obes Cont* 2(4): 00023.
9. Nikkhah A (2016) Running a pragmatic anti-cancer probiotic. *J. Prob. Health*. 4: e124.
10. Nikkhah A (2016) Morning Eating and Evening Exercise: Towards an Anti-Cancer Lifestyle. *J Cancer Prev Cur Res* 4(4): 00127.