

Bioregulatory Functions of Jason Winters Tea Extract

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九州大学

1. Nutrition

Vitamins, minerals

2. dietary fibre

3. Intestinal bacteria

4. Antioxidant

5. Anti-inflammatory

6. Immune activation

7. Hormonal Balance

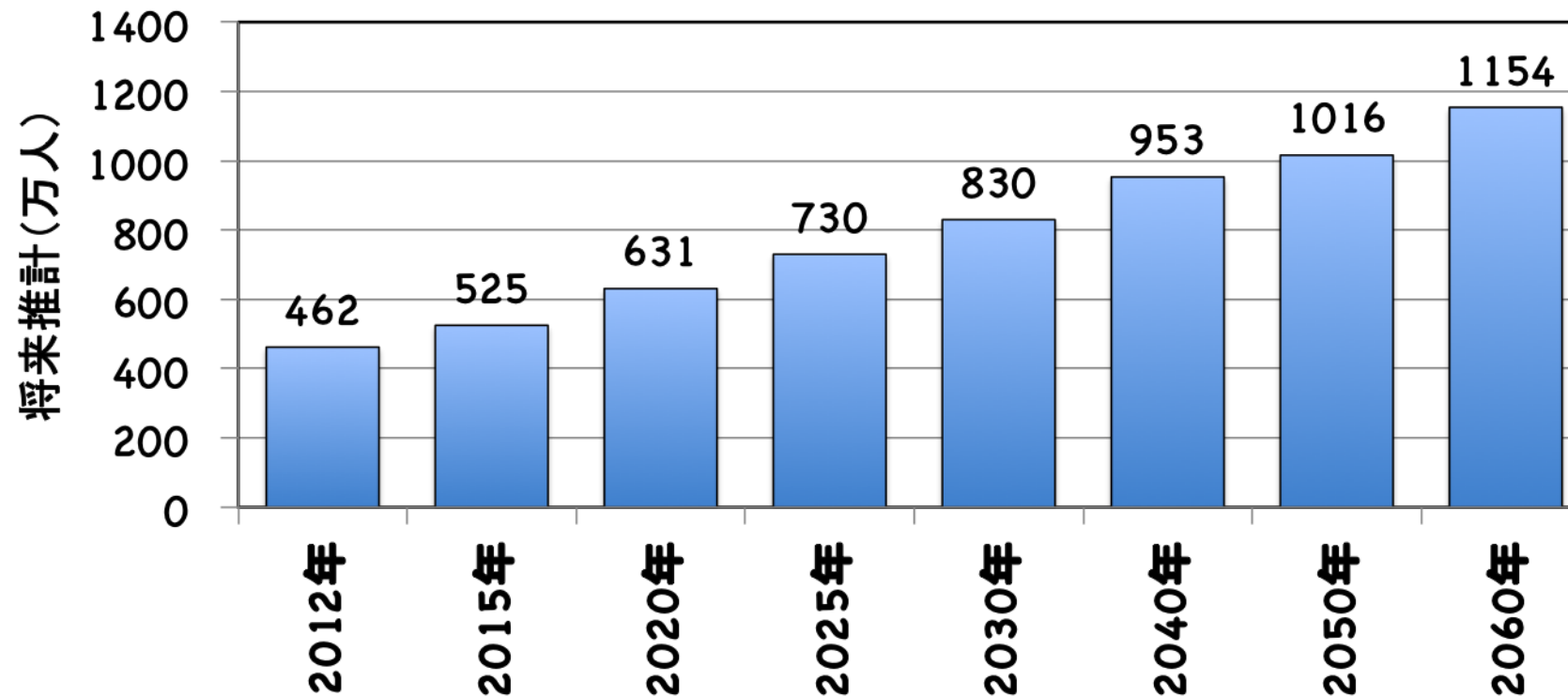
8. Metabolism improvement

Metabolic syndrome, bone metabolism

9. Lifestyle-related diseases

10. Exercise mimetic drugs

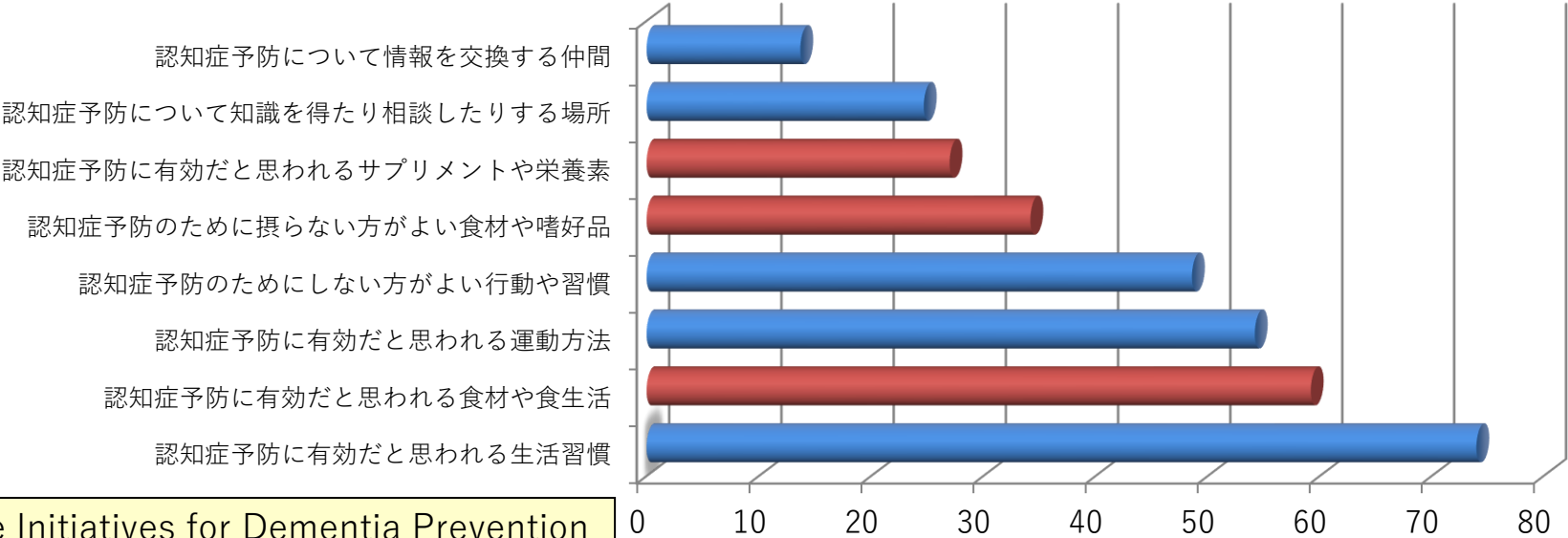
11. Longevity Gene



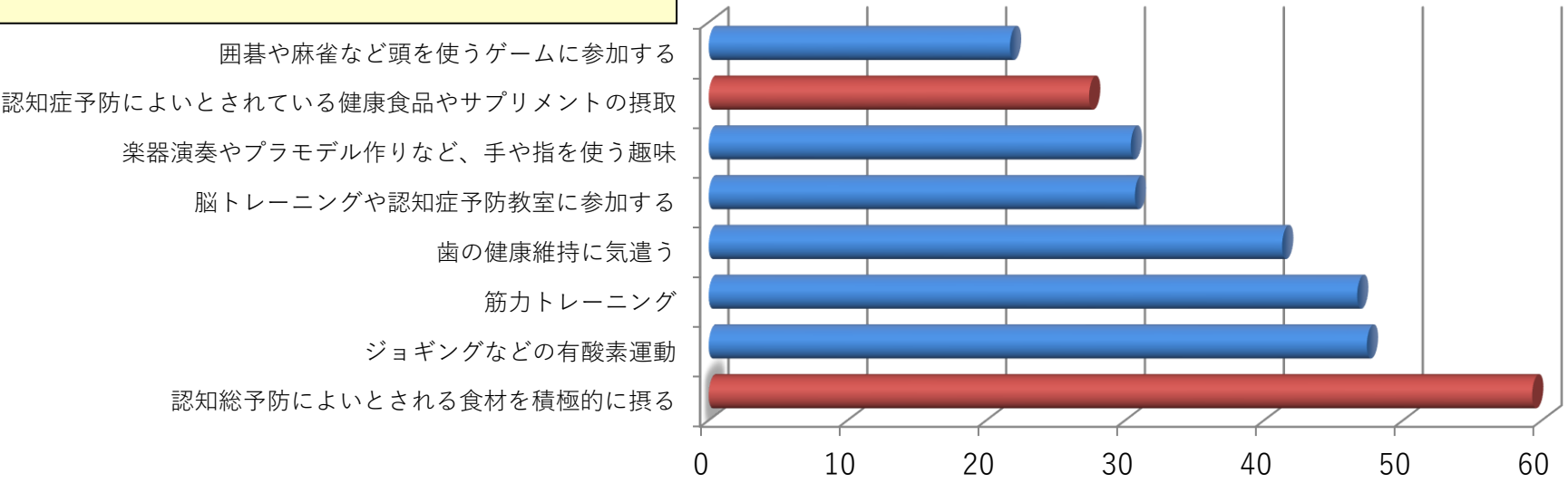
"A Study on Future Estimation of the Elderly Population with Dementia in Japan"
(Preliminary figures by Professor Ninomiya, Kyushu University)

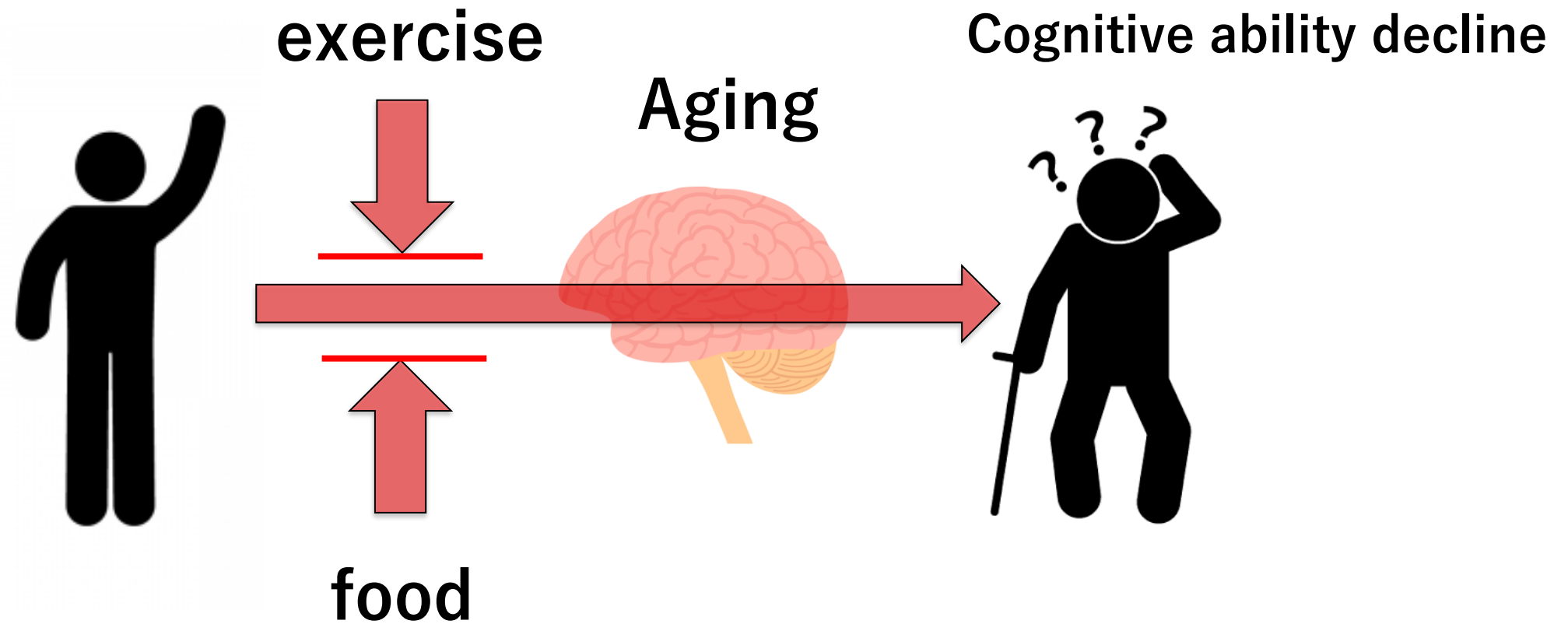
How to deal with dementia?

What information do you want about dementia prevention?



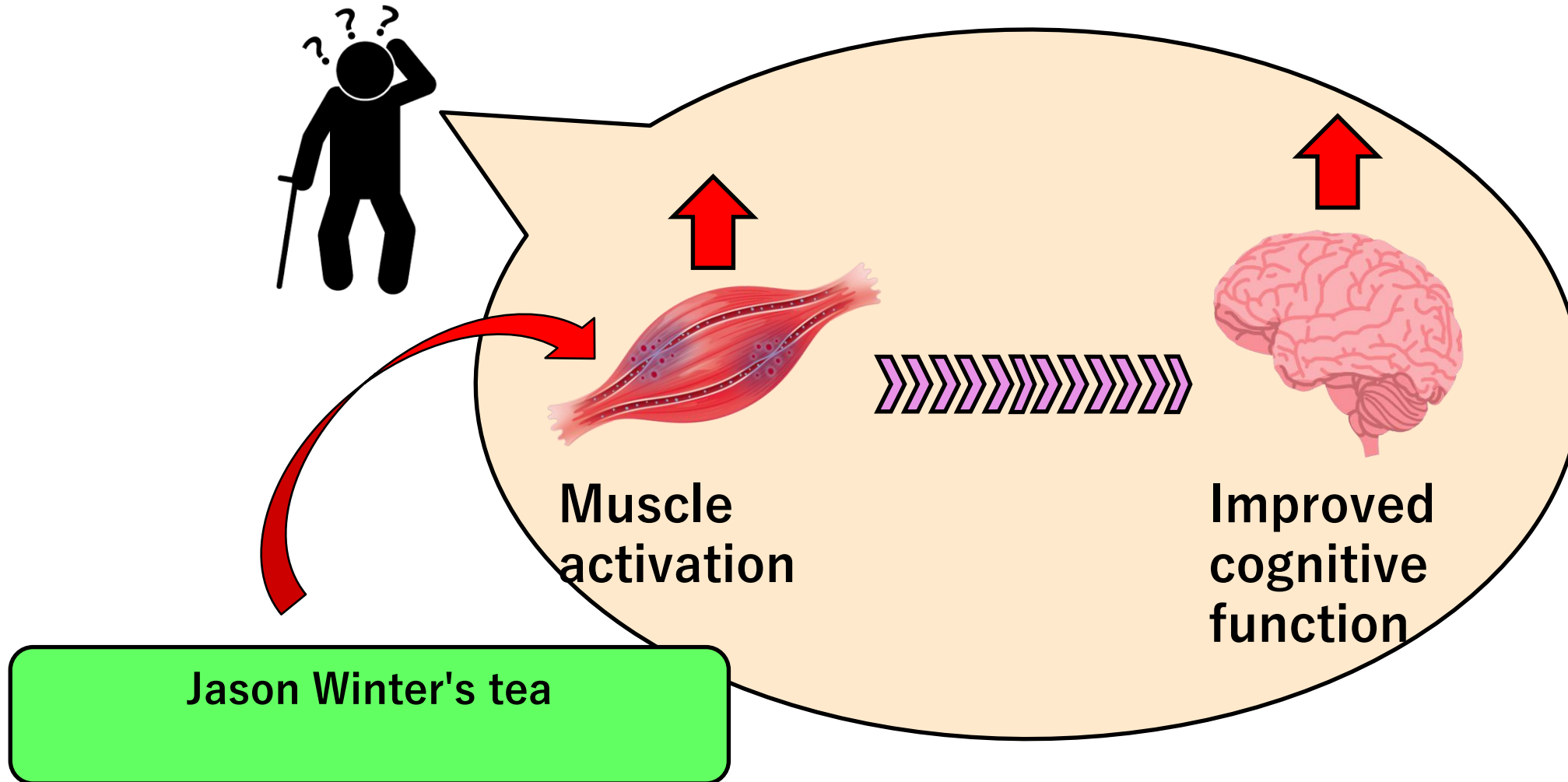
Concrete Initiatives for Dementia Prevention





How to deal with dementia?

5



How to deal with dementia?

6

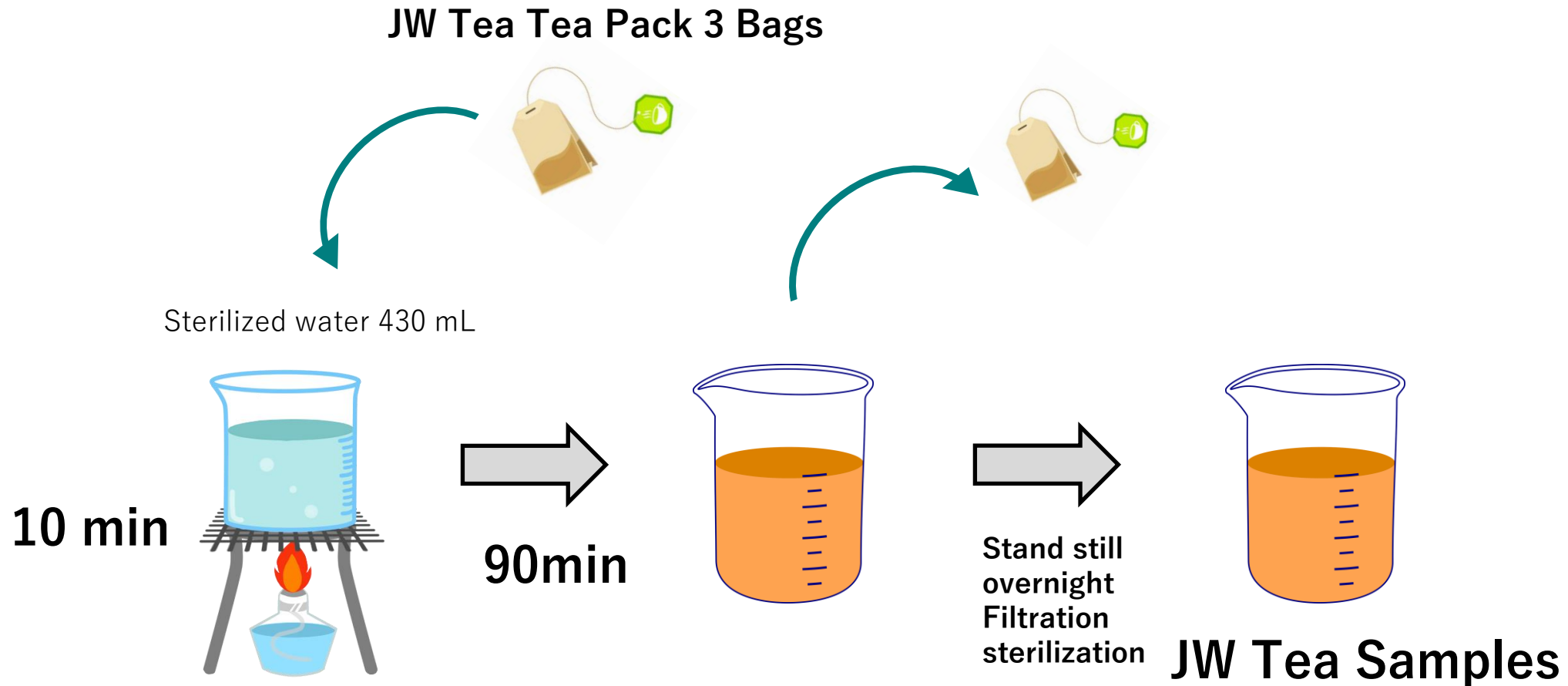
Red Clover
Indian Sage
Harvereen

oolong tea

Jason Winters Tea

Metabolism improvement, dementia prevention, constipation improvement, skin beautifying effect, etc.

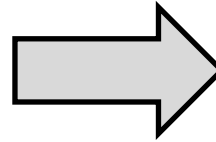




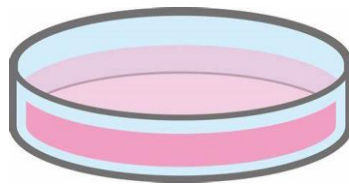
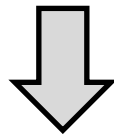
Learn how to prepare samples. First boil 430 mL of Milli-Q water and put 3 bags of JWT in it. After measuring for 10 minutes, turn off the heat and leave the tea pack in place for 90 minutes. The tea packs were then removed, laid overnight, and filtered and sterilized as samples.



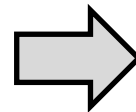
JW Tea Samples



Analysis of changes in gene expression in muscle cells

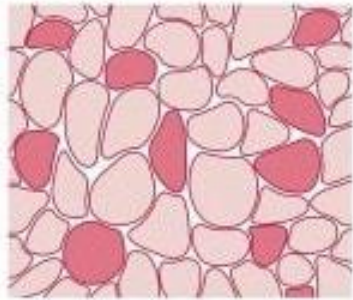


Muscle cells



Were muscle cells activated?

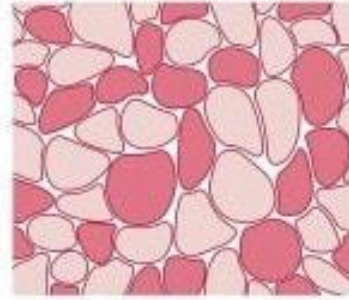
Types of Muscles



白筋(速筋)
ミオグロビンが少ない
ミトコンドリアが少ない



短距離走



ピンク筋(混合筋)



中距離走



赤筋(遅筋)
ミオグロビンが多い
ミトコンドリアが多い

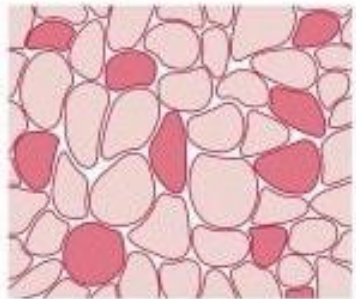
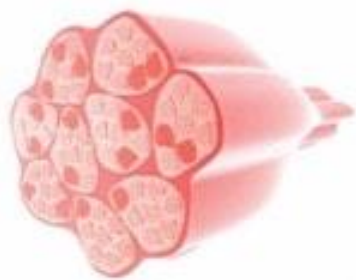


長距離走

健康的なミトコンドリア

栄養素と酸素を取り込んで
エネルギーをつくりだす





白筋(速筋)

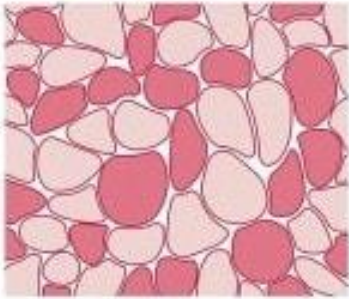
ミオグロビンが少ない
ミトコンドリアが少ない

Speed
runs



短距離走

Sprinting



ピンク筋(混合筋)

Intermediate
muscle



中距離走

Medium distance running



赤筋(遅筋)


ミオグロビンが多い
ミトコンドリアが多い

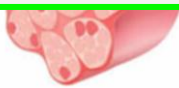


Tardier muscle
less myoglobin
Less mitochondria



長距離走

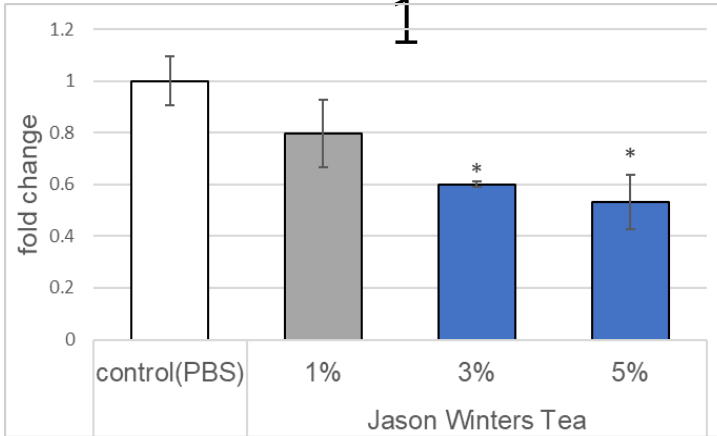
Long-distance running

	支配筋繊維	瞬発力	持久力	ミトコンドリア
Tardier muscle 	MyHC I			many
Intermediate muscle 	MyHC II a			middle
Speed ribs 	MyHC II b			few

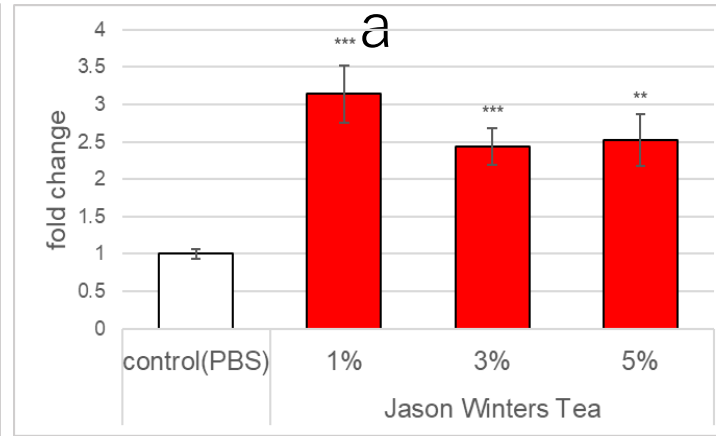
	支配筋繊維	瞬発力	持久力	ミトコンドリア
Tardier				
<p>Next, we examined how Jason Winters Tea caused changes in muscle fiber types. First, I will explain the muscle fiber type. Muscles can be broadly divided into slow muscles, fast muscles, and intermediate muscles with intermediate properties in between. The tardier muscle is a muscle with excellent endurance and a lot of mitochondria, and the fast muscle is a muscle with few mitochondria with excellent instantaneous power. And the intermediate muscle is a muscle fiber with relatively high instantaneous power, endurance, and mitochondrial count.</p>				
				

JW tea increased the middle muscle

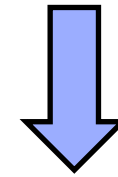
MyHC



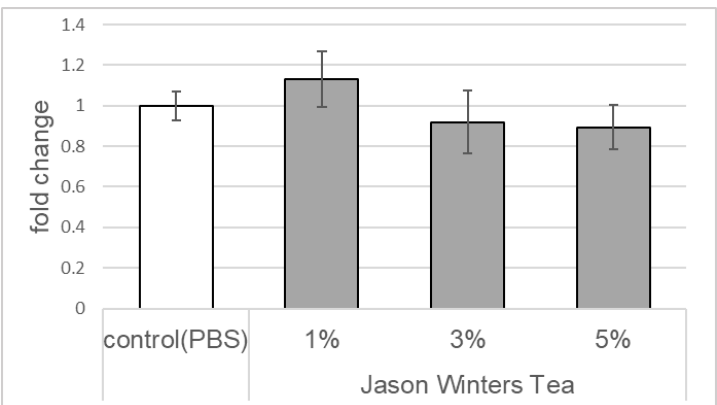
MyHC2



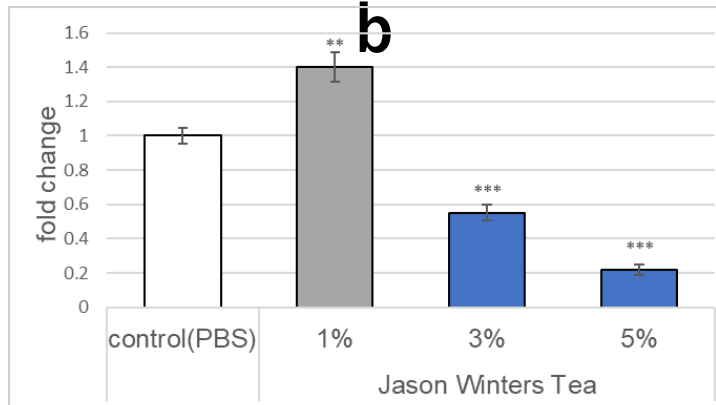
**MyHCII.a
increased**



MyHC2x



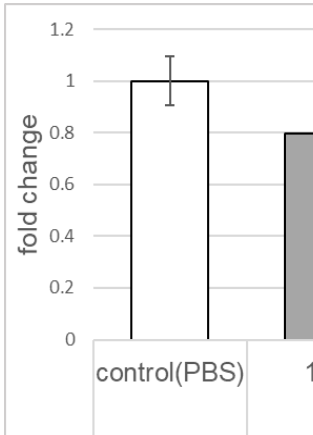
MyHC2



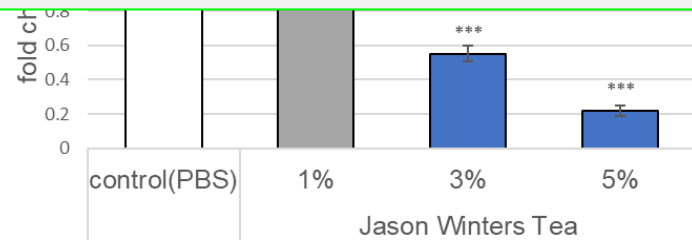
**II.a type
Increased
intermediate
muscles**

JW tea increased the middle muscle

MyHC

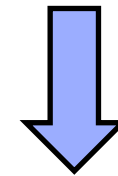


MyHC2



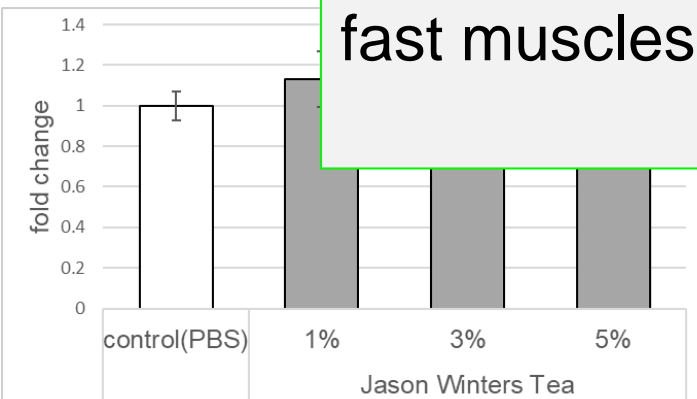
Muscle fibers are the result of type changes about. As a result of RT-PCR, not only MyHC1, a slow-myo-myozation marker, but also MyHC2b, a fast-myopathization marker, decreased, and MyHC2a was significantly increased, so it was thought that the intermediate muscle having the property intermediate between slow and fast muscles increased.

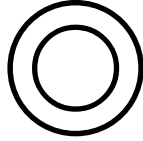

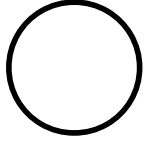
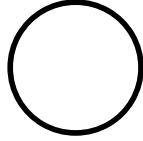
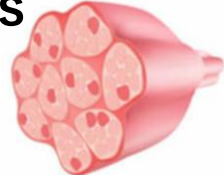
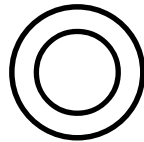
MyHCII.a
increased



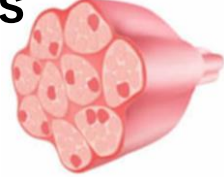


.a type
increased
intermediate
muscles

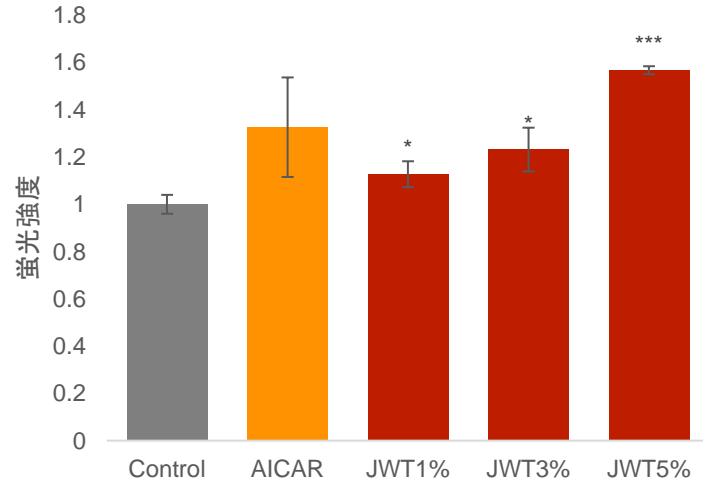
My



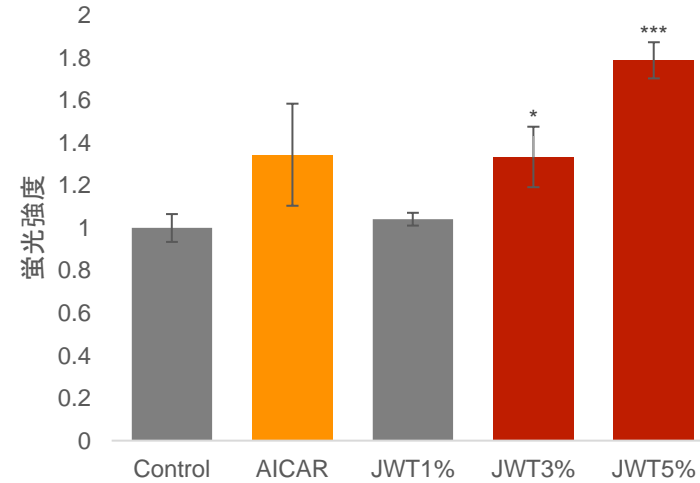
	支配筋繊維	瞬発力	持久力	ミトコンドリア
Tardier muscle 	MyHC I			many
Intermediate muscle 	MyHC II a			middle
Speed ribs 	MyHC II b			few

	<p>Next, we examined how Jason Winters Tea caused changes in muscle fiber types. First, I will explain the muscle fiber type. Muscles can be broadly divided into slow muscles, fast muscles, and intermediate muscles with intermediate properties in between. The tardier muscle is a muscle with excellent endurance and a lot of mitochondria, and the fast muscle is a muscle with few mitochondria with excellent instantaneous power. And the intermediate muscle is a muscle fiber with relatively high instantaneous power, endurance, and mitochondrial count.</p>	ミトコンドリア
Tardier muscle 		many
Intermediate muscle 		middle
Speed fibers 		few

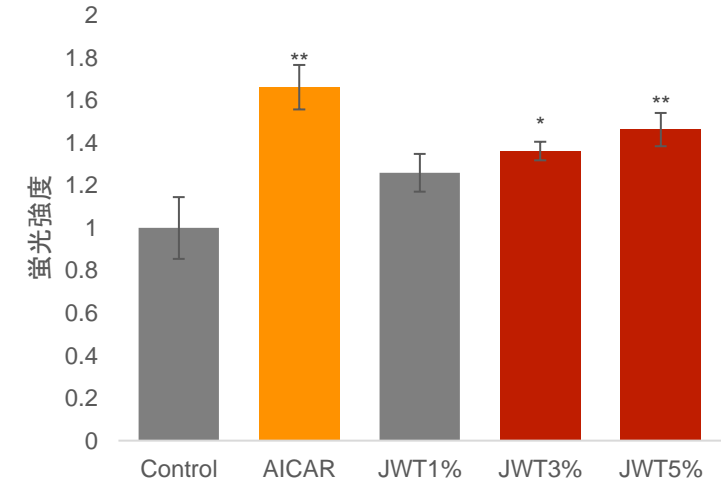
Mitochondrial number



Mitochondrial area

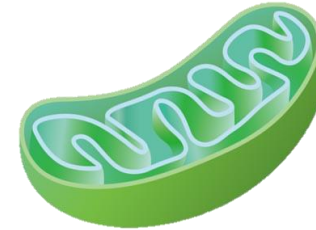
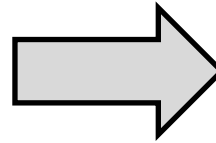


Mitochondrial activity

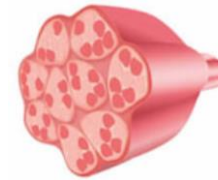




JW Tea Samples



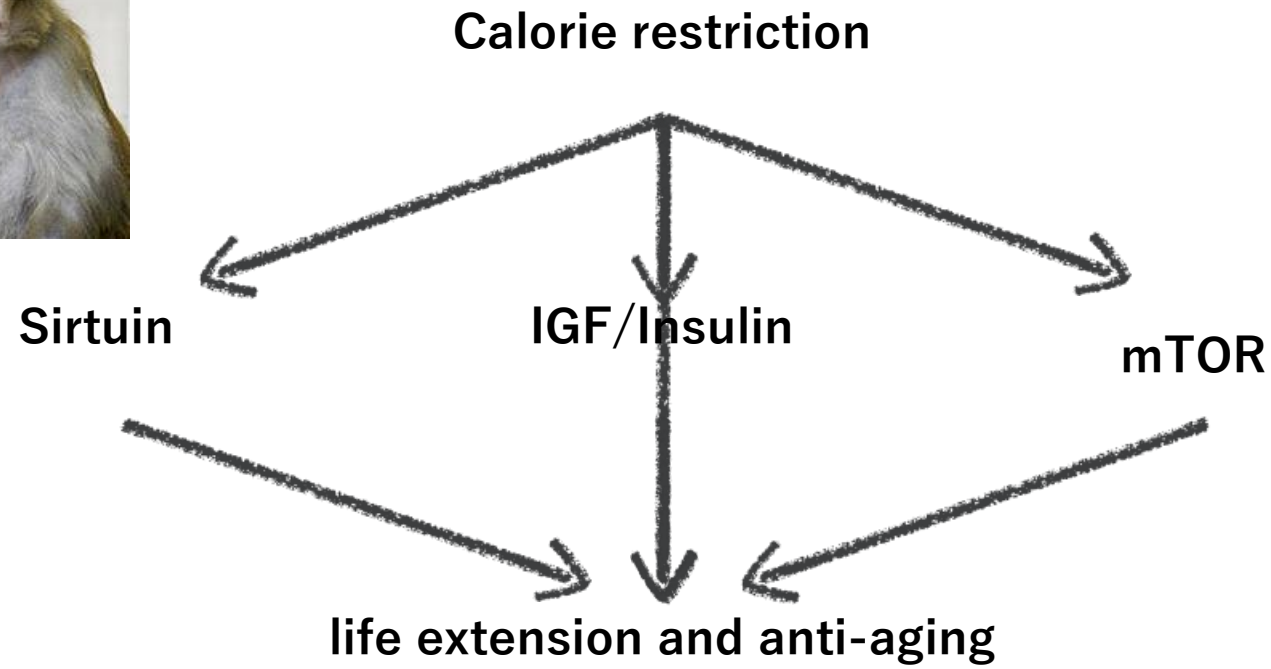
Mitochondrial number, activity



Intermediate muscle enlargement



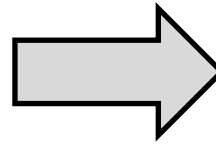
Anti-aging targets seen from the viewpoint of aging and longevity ²⁰



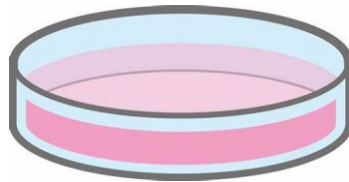
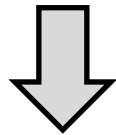
サーチュイン	局在	機能
SIRT1	核・細胞質	代謝・炎症・寿命延長
SIRT2	細胞質	細胞周期・運動性・ミエリン形成
SIRT3	ミトコンドリア	脂肪酸酸化・抗酸化制御
SIRT4	ミトコンドリア	インスリン分泌・脂肪酸酸化抑制
SIRT5	ミトコンドリア	尿素回路
SIRT6	核	ゲノム安定性・代謝・寿命延長
SIRT7	核小体	rDNA転写



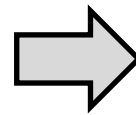
JW tea



Analysis of changes in gene expression in muscle cells

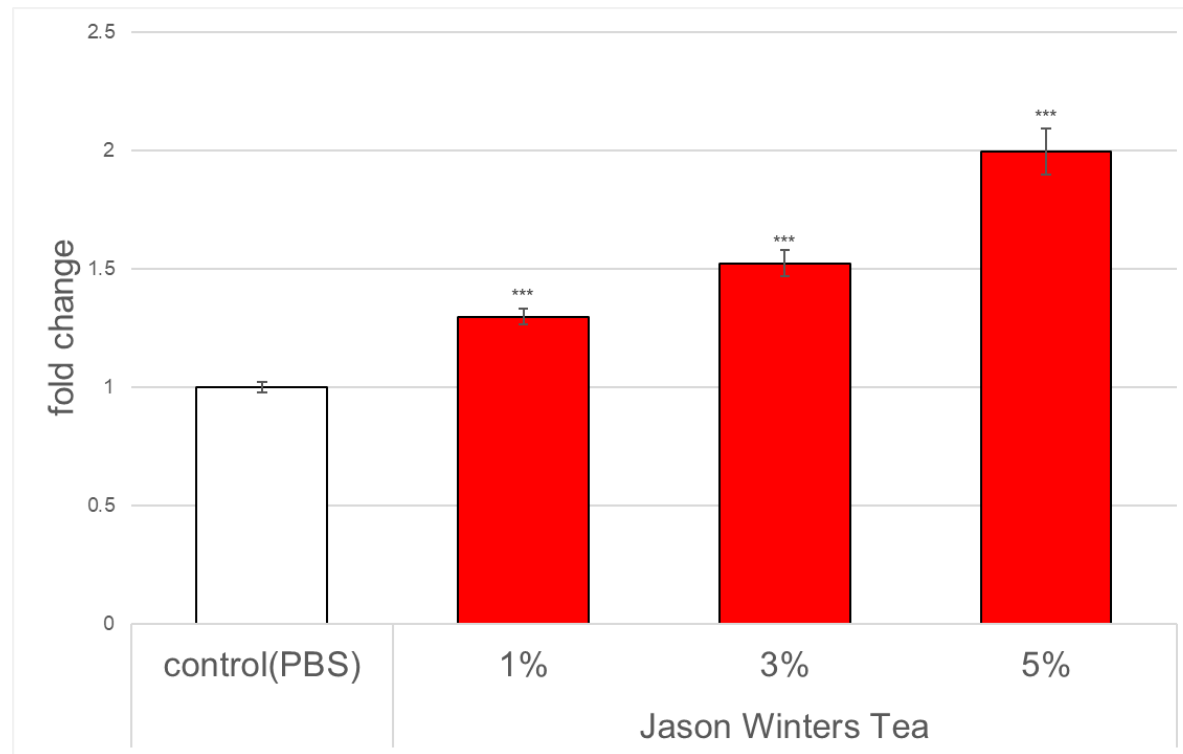


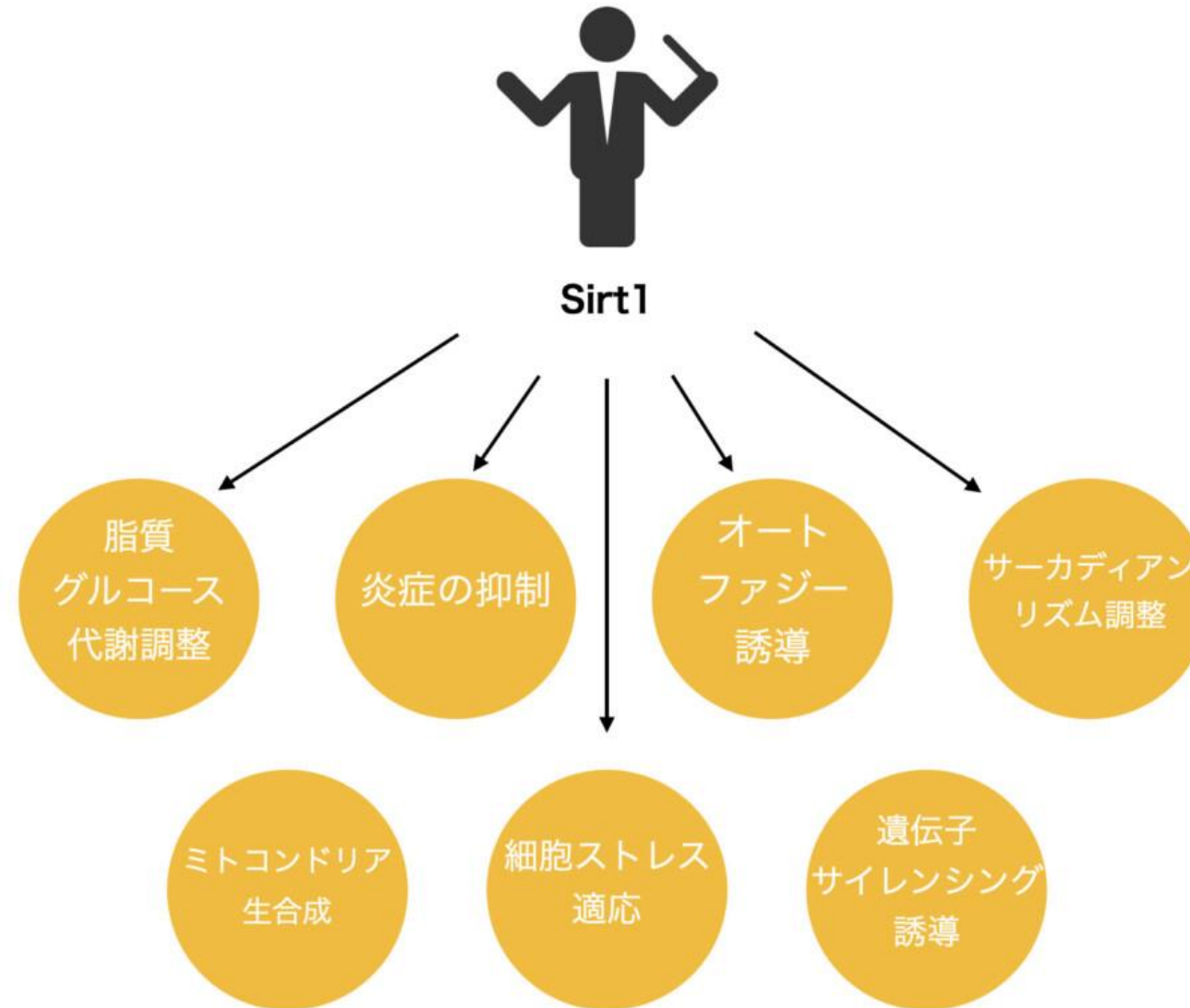
Muscle cells

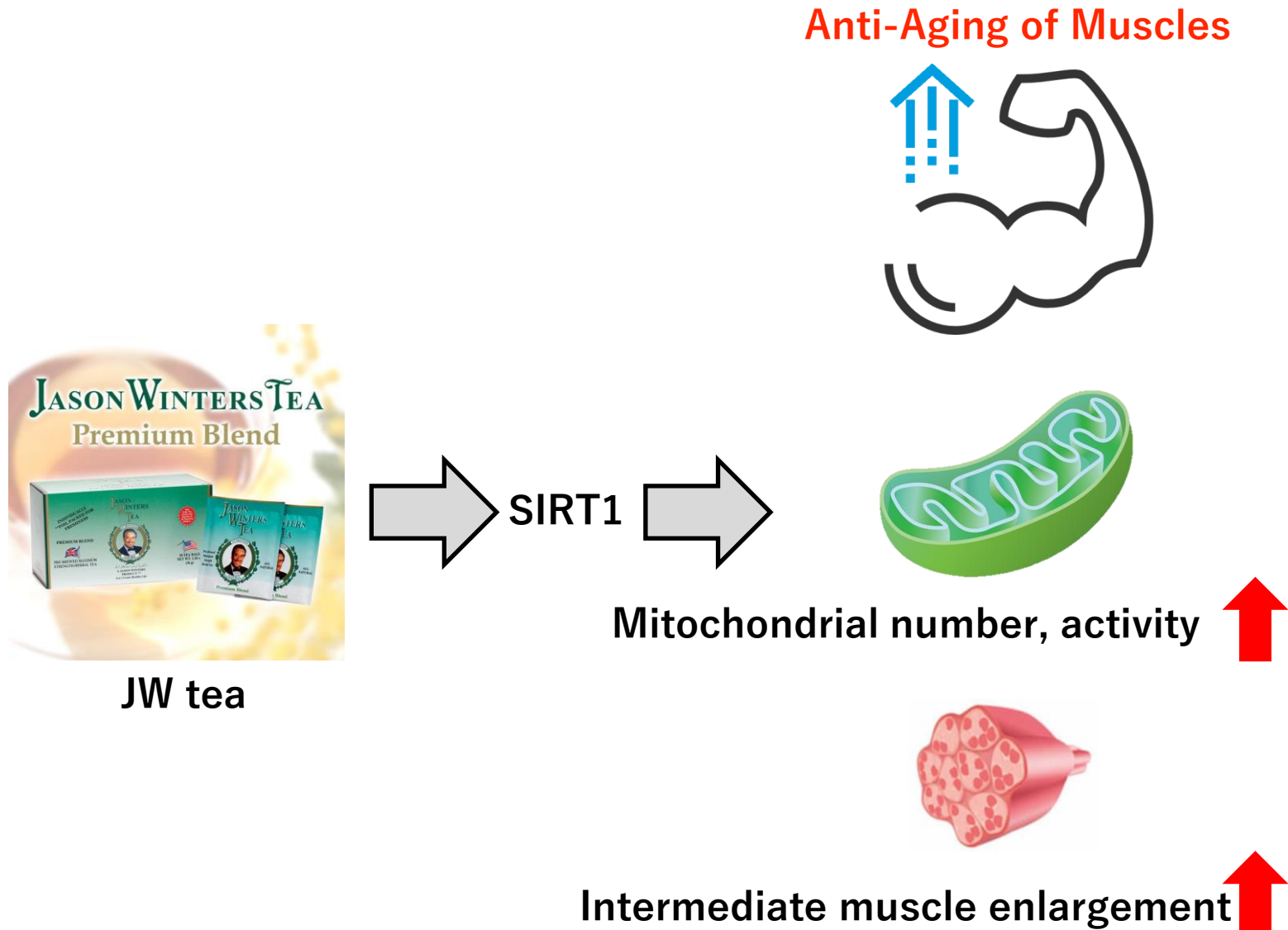


Were muscle cells activated?

SIRT1



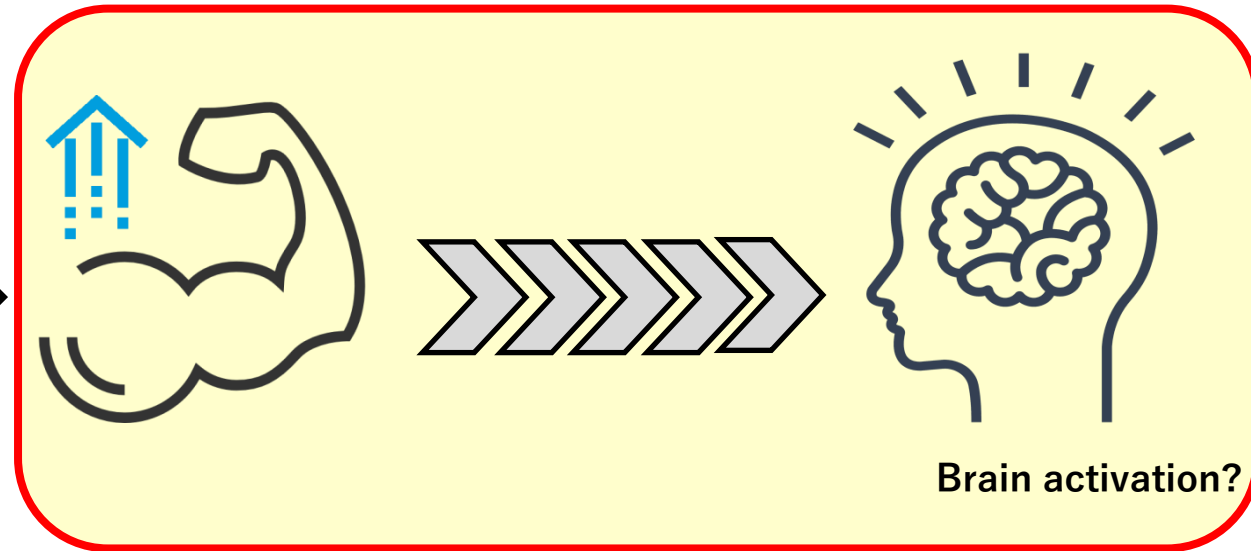
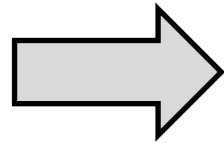




Improvement of brain function through muscle anti-aging of JW tea⁶

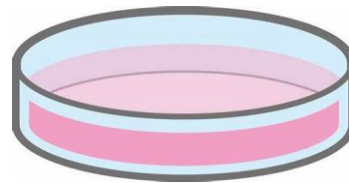
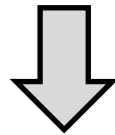


JW tea

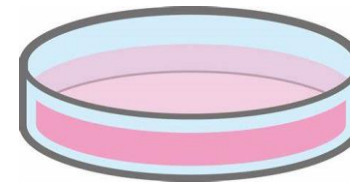
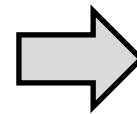




JW Tea Sample



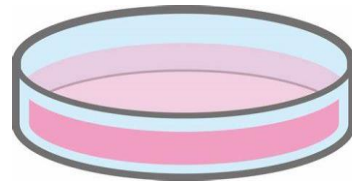
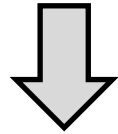
**Muscle
cells**



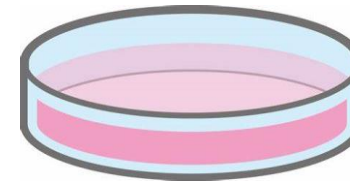
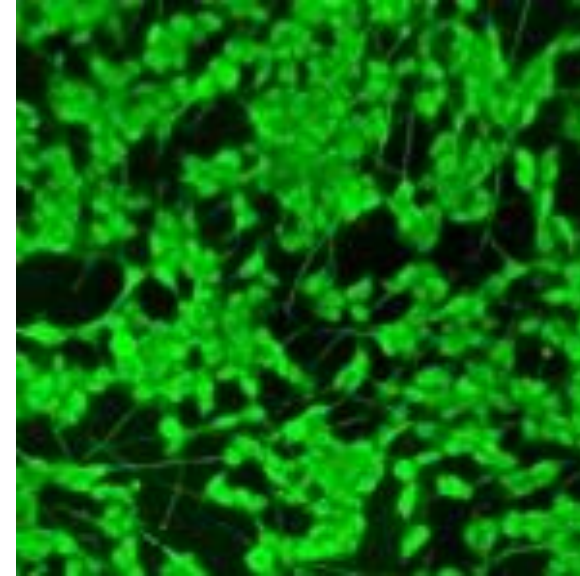
**neuron
cell**



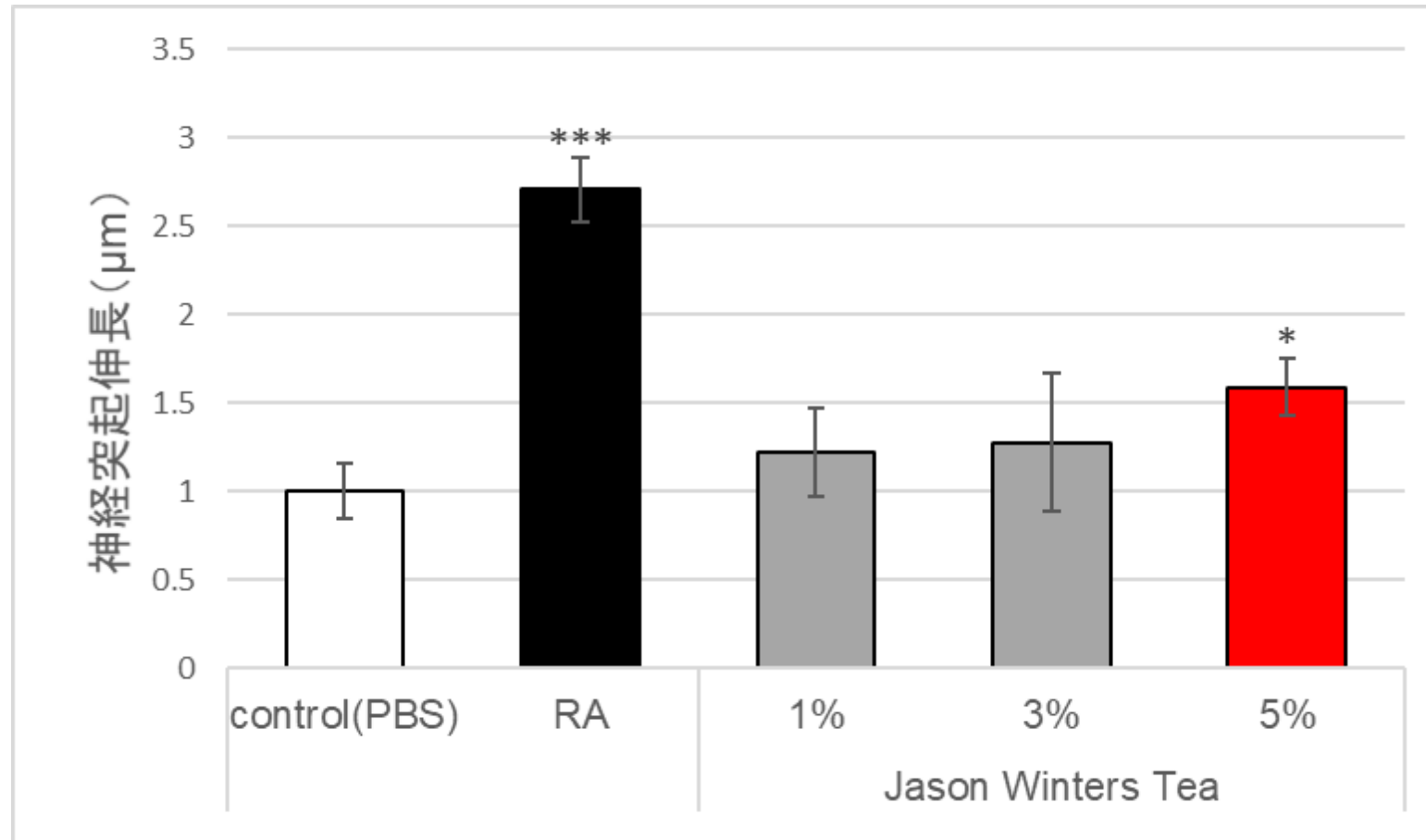
JW tea



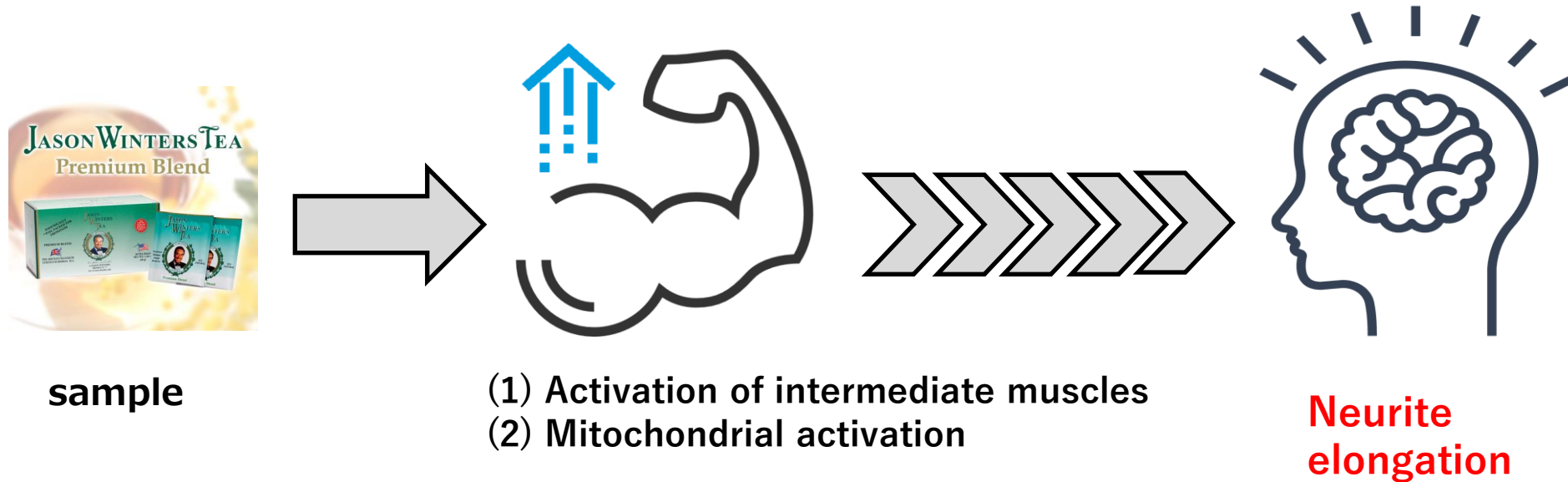
Muscle
cells



neuron
cell



Improvement of brain function through muscle anti-aging of JW tea²⁰



Jason Winters Tea rejuvenates the muscles,
As a result, nerve activation was promoted.

Anti-aging of the whole body through muscle activation of JW tea 31

