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## Data in Brief

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## Data Article

## Data on body weight and liver functionality in aged rats fed an enriched strawberry diet



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## ABSTRACT

Here, we present new original data on the effects of strawberry consumption on body weight and liver status of aged rats. Wistar rats aged 19–21 months were fed a strawberry enriched diet prepared by substituting 15% of the total calories with freeze-dried strawberry powder for two months. Body weight, plasma biomarkers of liver injury (alanine transferase, aspartate aminotransferase and alkaline phosphatase) and liver histological analysis were assessed. These data indicate that strawberry supplementation did not interfere with normal animal maintenance and with liver structure and

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functionality. For further details and experimental findings please refer to the article “Strawberry consumption improves aging-associated impairments, mitochondrial biogenesis and functionality through the AMP-Activated Protein Kinase signaling cascade” in FOOD CHEMISTRY (Giampieri et al., 2017) [1].

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## Specifications Table

Subject area	<i>Medicine</i>
More specific subject area	<i>Nutritional biochemistry, aging</i>
Type of data	<i>Tables, images, file text</i>
How data was acquired	<i>Absorbance was acquired using a microplate reader (Bio-Tek Instrument Co., WA, USA), while tissue observation was performed with APERIO ScanScope digital system (Nikon, Firenze, Italy).</i>
Data format	<i>Raw data collection and analysis</i>
Experimental factors	<i>Plasma isolation and tissue staining</i>
Experimental features	<i>Body weight, plasma biomarkers of liver injury and liver histological analysis were performed in aged rats after two months of strawberry supplementation.</i>
Data source location	<i>Ancona, Italy</i>
Data accessibility	<i>Data are available with this article</i>
Related research article	<i>Giampieri F et al. Strawberry consumption improves aging-associated impairments, mitochondrial biogenesis and functionality through the AMP-Activated Protein Kinase signaling cascade. Food Chemistry, In press.</i>

## Value of the data

- The presented data indicate that strawberry consumption doesn't increase body weight and liver ratio.
- The presented data show that strawberry consumption doesn't affect the structure and functionality of aged livers.
- These data are the further evidence that strawberries can be used as a natural source of bioactive compounds with healthy benefits.
- These data could be of utmost importance to promote these fruits also in the diet of aged people.

## 1. Data

Rats were fed an enriched strawberry diet for two months and were weighed once a week for the whole experimental period. Compared with control group, strawberry supplementation didn't interfere with body weight (Fig. 1) and liver ratio (Table 1). In addition, strawberry consumption didn't affect biomarkers of liver injury measured in plasma (Table 1) as well as liver histology (Fig. 2): no differences were in fact observed for these parameters in the group supplemented with strawberries compared to the control group.

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