Reply to the Letter “Coffee consumption and extreme longevity: a risk assessment”

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We would like to thank Dr. Tomoyuki Kawada [1] for his interest in our manuscript “Major cardiovascular disease (CVD) risk factors in midlife and extreme longevity” [2].

Dr. Kawada’s first comment is about the mean frequency of coffee consumption. He may wonder why we did not observe significant difference in consumption between those who reached 90 years of age and those who did not, despite benefits for mortality in many studies [3, 4]. Because in many studies comparison has been between zero or low use vs. higher consumption, the reason may be that in Finland, consumption of coffee has been traditionally high; in our male cohort median use was 4 cups/day in midlife. Moreover, 87.5% of the men reported consuming at least 2 cups/day—a level found beneficial for prevention [4]—and potential benefit of coffee for longevity may thus not have been possible to record in this particular cohort.

Second, also in this cohort reported coffee consumption was positively associated with smoking, and it must be taken into account in the analyses of coffee consumption and mortality. However, restricting our analyses to nonsmokers in midlife did not change the association between coffee and longevity.

Dr. Kawada’s third comment is about unfiltered coffee and its association low-density lipoprotein cholesterol and triglyceride levels. Type of coffee was not asked from our participants but use of filtered coffee started to become prevalent in Finland during the 1960s, and in 1974 most

consumption in our predominantly urban cohort was probably filtered coffee. Therefore, it is unlikely—although not proven—that type of coffee interfered with our results.

We certainly agree that self-report is not the most reliable way to assess consumption of nutrition items. However, a few points in our cohort may reduce this concern. The men were from a professional group (executives and businessmen) probably used to give more accurate estimates than population at large. Coffee consumption was also asked in 1986 in 1356 men, and correlation with 1974 self-report was good ($r=0.6$, $p<0.001$). No relationship with longevity was observed with the 1986-consumption. Furthermore, self-report of alcohol consumption was associated with longevity, which is plausible.

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Compliance with ethical standards

Conflict of interest The authors have no conflict of interest to report.

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