Food consumption, cognitive functions and Nobel laureates

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A recent paper by Messerli¹ suggests that:

"Since chocolate consumption could hypothetically improve cognitive function not only in individuals but also in whole populations, I wondered whether there would be a correlation between a country's level of chocolate consumption and its population's cognitive function."

and finds that

"Chocolate consumption enhances cognitive function, which is a sine qua non for winning the Nobel Prize, and it closely correlates with the number of Nobel laureates in each country."

This important result is quite interesting and stimulating, but is in some way limited. I have therefore thought to provide some extensions to the study. Using the same methods and the same data about Nobel laureates per capita in their home countries, I have run correlations with a number of other food and beverages. Data come from the online FAO databases (http://www.faostat.org): The results are in Table 1. Both Pearson correlation and Spearman's rho coefficients are listed along with their significance values (asterisks significant values: **=significant at 0.001 level, *= significant at 0.05 level).

Table 1: Correlations between Nobel laureates and food & beverages

	Pearson Correlation			Spearman's rho		
Nobel laureates vs.	Coeff.		p-value	Coeff.		p-value
Apples	0.234		0.059	0.620	**	0.000
Beer	0.071		0.580	0.488	**	0.000
Butter	0.237		0.056	0.467	**	0.000
Cereals	-0.275	*	0.025	-0.480	**	0.000
Coffee	0.206		0.124	0.655	**	0.000
Eggs	0.025		0.840	0.262	*	0.034
Honey	0.231		0.100	0.340	*	0.014
Lemons	-0.107		0.409	0.160		0.215
Meat	0.360	**	0.003	0.663	**	0.000
Milk	0.261	*	0.036	0.685	**	0.000
Nuts	0.169		0.175	0.437	**	0.000
Onions	-0.266	*	0.035	-0.281	*	0.026
Pasta	0.010		0.953	0.078		0.652
Pepper	0.632	**	0.000	0.313		0.041
Potatoes	-0.034		0.785	0.394	**	0.001
Poultry meat	0.414	**	0.001	0.377	**	0.002
Sugar	0.286	*	0.020	0.515	**	0.000
Tea	-0.079		0.536	0.050		0.697
Tomatoes	-0.157		0.212	0.097		0.442
Wine	0.578	**	0.000	0.698	**	0.000

Not being a physician I do not dare to provide explanations for these results, but I am sure that the readers of this

journal will easily find a number of plausible justifications.

Following Messerli's considerations, however, I can humbly suggest that a dinner composed of a steak au poivre or a chicken au poivre (but with no onions), with a glass of wine and an oven baked apple with butter and sugar could be a powerful enhancer for the cognitive functions of many individuals.

Reference

1 Messerli, F. H. (2012). <u>Chocolate Consumption, Cognitive Function, and Nobel Laureates</u>. *New England Journal of Medicine*, 367: 1562-1564.

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