

# Fat Consumption and Suicide

D. Lester, Ph.D.<sup>1</sup>

## Abstract

*The consumption of fat (but not protein) in European nations was found to be associated with national suicide rates (but not homicide rates). This result supports recent research which reports an association between national levels of fat consumption and the prognosis of schizophrenia.*

Recently, Christensen and Christensen<sup>1</sup> examined the consumption of fat in eight nations of the world and found that nations with a higher per capita consumption of fat had schizophrenics with more unfavourable courses and outcomes. They concluded that the composition of food may influence the prognosis of schizophrenia, and they suggested that low fat diets may prove to be a useful adjunct to more conventional therapies for schizophrenics.

Suicide is more common in psychotics than in neurotics or patients with other psychiatric disorders. For example, Pokorny<sup>2</sup> reported higher suicide rates in patients with schizophrenia and affective disorder than in those with neurosis, organic disorders and alcohol disorders. More recent studies by Farberow, et al<sup>3</sup> and Lindelius and Kay<sup>4</sup> have confirmed this finding.

Accordingly, the present paper was designed to explore whether the pattern of food consumption in a sample of nations was related to the suicide rates of those nations. Christensen and Christensen had to limit their study to the eight nations with data on schizophrenics. A broader sample of nations with data on suicide rates was available for the present study, and it was decided to restrict the sample to the sixteen nations in Western Europe since socioeconomic variables are strongly associated with suicide rates in heterogeneous samples of nations.<sup>5</sup>

1. Richard Stockton State College, Pomona, New Jersey, USA.

For contrast, to see whether the consumption of fat was associated with only some or with all pathologies, homicide rates were examined also for their association with food consumption in the nations. Lester<sup>5</sup> has shown that often national suicide and homicide rates show opposite associations with socioeconomic variables, and so the study of homicide rates is of special interest here.

## Method

Data on the food supplies for the 16 Western European nations were obtained from the Food and Agricultural Organization of the United Nations (FAO) for 1979-1981.<sup>6</sup> Ratings were obtained for the per capita supply of calories, protein, total fat, fat from meat, stimulants (coffee and tea) and alcoholic beverages. Suicide and homicide rates for 1979-1981 were obtained from the World Health Organization annual volume *Annual Statistics*.

## Results and Discussion

The raw data are shown in Table 1. Pearson correlations between the food supply characteristics of the nations and the rates of suicide and homicide are shown in Table 2.

It can be seen that suicide rates were associated only with the per capita fat supply and the per capita fat supply from meats and offals. Homicide rates were not associated with any of the food supply measures.

The present study supports and extends the findings of Christensen and Christensen.<sup>1</sup> Fat consumption, but not protein consumption, was associated with the rate of suicide in European nations. Furthermore, the association was limited to suicide and did not extend to homicide. The specificity of the finding is noteworthy. It may well be that diet does have an impact on mental health, though the results of both the present study and that of Christensen and Christensen are consistent with

**Table 1**  
**Food Supply in 16 Western European Nations**  
**(grams per capita supply)**

	calories	protein	fat	fat (meat)	stimulants	alcohol	suicide rate	homicide rate
Austria	3575	91.0	172.7	38.7	17.5	396.4	26.0	1.3
Belgium	3639	102.4	179.2	62.7	20.7	424.0	21.5	1.6
Denmark	3548	103.8	172.2	64.4	38.3	412.0	29.1	1.2
Finland	3079	93.3	131.4	43.8	40.9	180.4	24.7	2.9
France	3529	108.2	157.2	51.6	15.8	412.5	19.2	1.0
Germany	3351	92.7	142.5	41.0	28.2	488.7	21.4	1.2
Greece	3668	108.1	144.0	31.7	83.1	149.0	3.2	1.1
Ireland	3699	105.6	141.2	50.4	16.1	246.6	6.2	1.2
Italy	3688	104.9	139.3	36.4	10.6	313.9	7.1	1.8
Netherlands	3617	92.3	183.2	55.2	38.0	285.9	10.2	0.8
Norway	3391	101.4	147.4	33.7	43.1	144.5	12.4	1.1
Portugal	3204	84.9	103.2	28.7	22.4	313.4	8.3	1.4
Spain	3294	95.8	128.2	38.0	12.3	319.6	4.4	1.0
Sweden	3146	88.8	149.5	49.4	39.0	176.9	19.1	1.3
Switzerland	3455	91.7	162.5	56.6	33.0	323.9	24.7	1.0
UK	3249	90.1	142.5	43.8	19.5	362.1	8.7	0.8

**Table 2**  
**Correlations between food supply**  
**and rates of suicide and homicide**

	suicide rate	homicide rate
calories	-0.14	-0.30
protein	-0.16	-0.02
fat	0.50*	-0.27
fat (meat)	0.56*	-0.09
stimulants	-0.04	0.01
alcoholic beverages	0.40	-0.22

\* significant at the 5% level

the possibility that particular cultural factors affect both diet and psychiatric disorder.

Interestingly, the consumption of stimulants (tea and coffee) and alcohol was not associated with suicidal behaviour in these nations, despite the well documented association of suicidal behaviour and alcoholism.<sup>7</sup>

#### References

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