

INTRODUCTION

Many studies have evaluated dietary habits of patients with inflammatory bowel disease (IBD) and their impact on disease activity. Some patients attribute their symptoms to be partly related to their diet, but most are unsure what nutritional guidelines to follow, as results of these studies have been mixed. This study aims to evaluate this association in Lebanese patients with IBD, as no investigation of this kind has been done in Lebanon.

METHODS

This study is a case-control study comparing IBD patients to age and gender matched controls. Cases were divided into 2 groups, those in remission and those with active disease according to HBCD and UCAI. Nutritional profile was compared using a validated food frequency questionnaire adapted to the Lebanese diet.

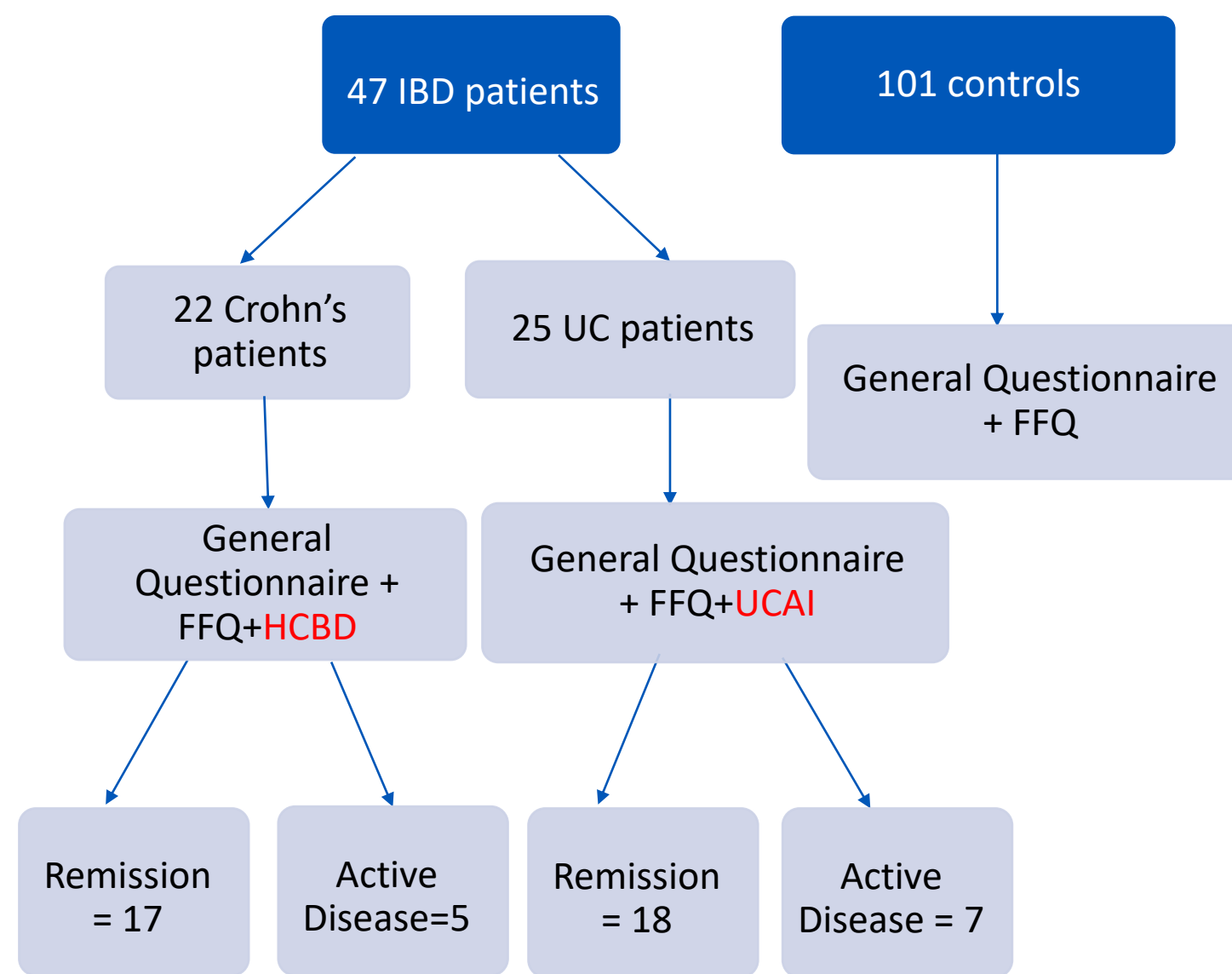


Figure 1. Flowchart representing questionnaire administration and division of subgroups

RESULTS

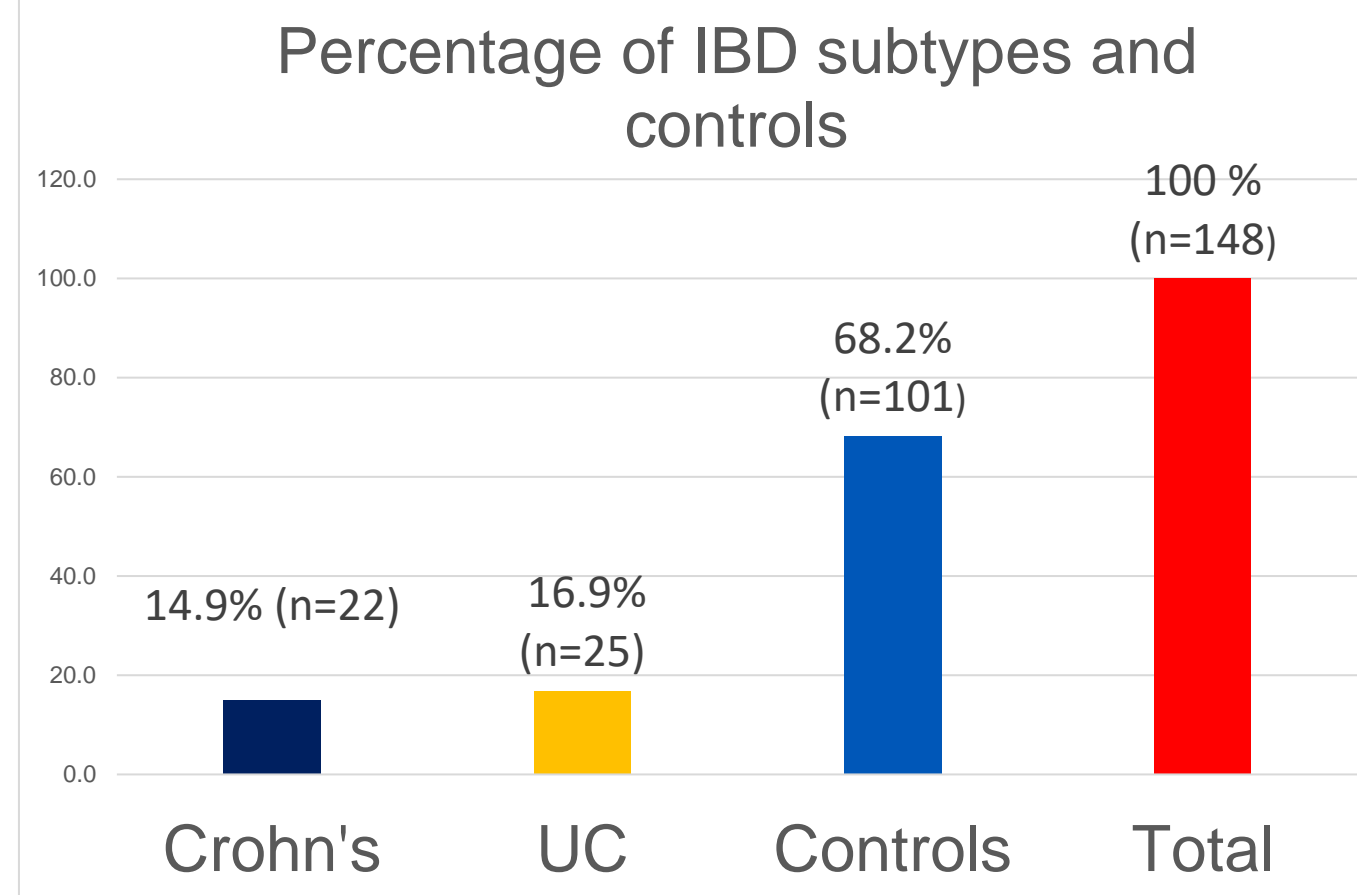


Figure 2. Number and proportion of patients with Crohn's and UC, and number and proportion of controls, respectively

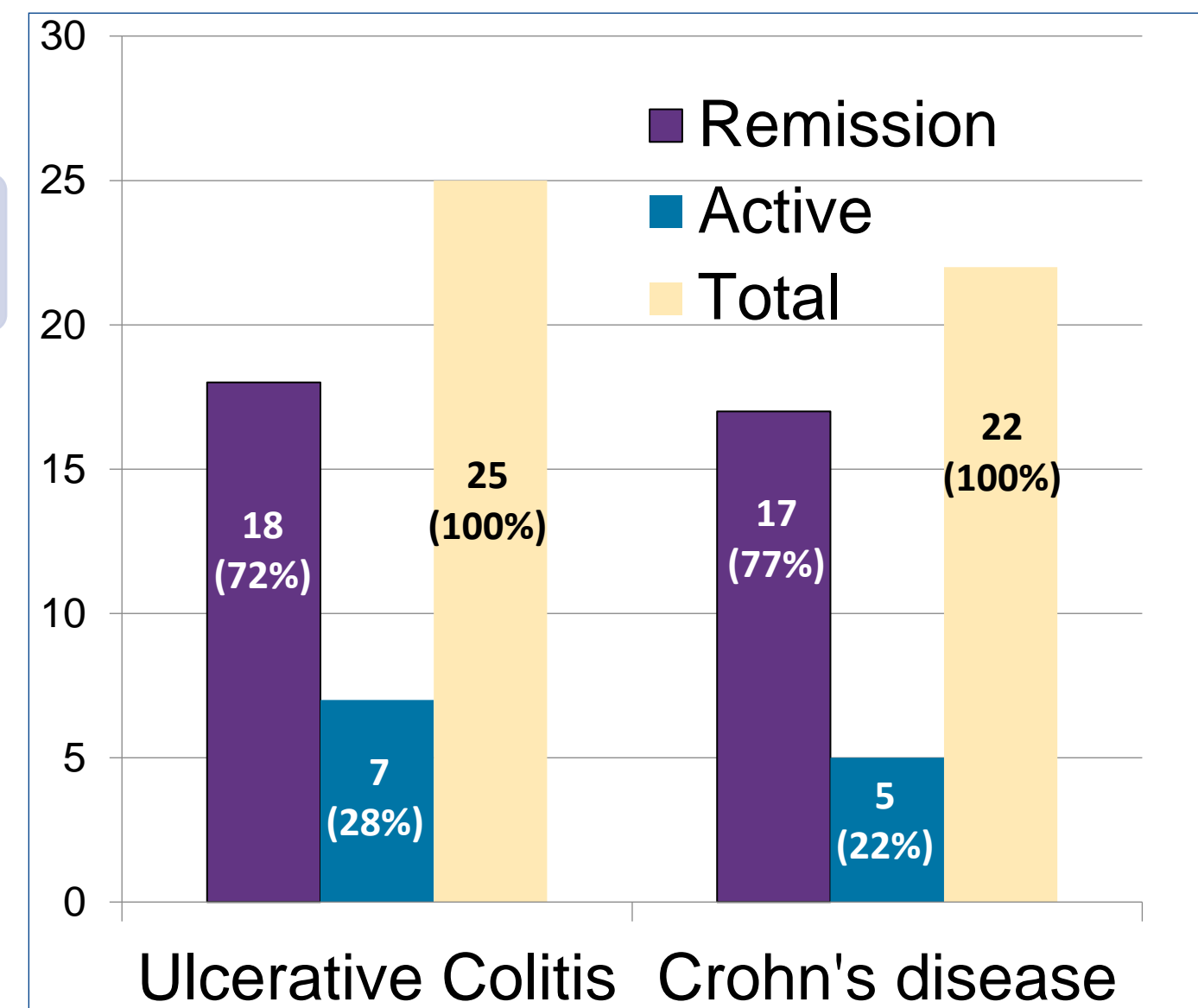


Figure 3. Number and proportion of patients in remission versus active disease in both UC and Crohn's respectively

RESULTS

	Cases	Controls	p-value	Total (n=148)
Age (years), mean ± SD	n=47 35.63±0.14	n=101 33.05±0.19	0.256	33.87±0.17
Gender, n (%)			0.484	
Male	21 (44.7%)	39 (38.6%)		60 (40.5%)
Female	26 (55.3%)	62 (61.4%)		88 (59.5%)
BMI (kg/m ²)	25.11 ± 0.07	23.29 ± 0.06	0.006	23.87 ± 0.07
Place of residence, n (%)			0.314	
Academic level, n (%)			0.230	
Illiterate	0 (0%)	0 (0%)		0 (0%)
Elementary	3 (6.7%)	2 (2%)		5 (3.4%)
Intermediate, Secondary	6 (12.7%)	7 (6.9%)		13 (8.8%)
University	38 (80.9%)	92 (91.1%)		130 (88.4%)
Occupation, n (%)			0.310	
Liberal profession	13 (27.7%)	20 (19.8%)		33 (22.3%)
Employee	20 (42.6%)	39 (38.6%)		59 (39.9%)
Retired/unemployment/Other	14 (29.8%)	42 (41.6%)		56 (37.9%)
Crowding index †, n (%)			0.093	
≤ 1	30 (64.0%)	76 (75.2%)		106 (71.6%)
> 1	17 (36.1%)	25 (24.8%)		42 (28.4%)
Smoking (yes), n (%)	13 (28.9%)	11 (11%)	0.021	24 (16.2%)
Other illnesses (yes), n (%)	18 (38.3%)	30 (30%)	0.581	48 (32.4%)
Physically Active (yes), n (%)	17 (36.2%)	52 (51%)	0.092	69 (46.6%)

Table 1. Baseline sociodemographic, anthropometric, and environmental parameters for cases and controls.

RESULTS

	Controls (n=101)	IBD patients in Remission (n=28)	IBD patients with active disease (n=19)	p-value
Energy Intake (kcal/day) for men	2622.4 ± 0.21	1923.53 ± 0.16	1644.37 ± 0.03	0.015
Energy Intake (kcal/day) for women	2597.2 ± 0.17	1563.15 ± 0.05	1897.14 ± 0.13	0.0001
BMI (kg/m ²)	23.29 ± 0.06	25.87 ± 0.06	24.03 ± 0.08	0.007
Average (%) of Protein of TEI	16.06 ± 0.09	18.62 ± 0.05	16.48 ± 0.08	0.004
Average (%) of Lipids of TEI	38.33 ± 0.08	30.28 ± 0.06	33.02 ± 0.07	0.0001
MUFAs (%)	12.33 ± 0.11	11.52 ± 0.06	11.04 ± 0.12	0.119
PUFAs (%)	6.05 ± 0.15	5.14 ± 0.10	6.58 ± 0.12	0.032
SFAs (%)	11.95 ± 0.12	6.50 ± 0.14	6.84 ± 0.14	0.0001
Average (%) of carbohydrates of TEI	45.15 ± 0.05	50.68 ± 0.03	49.30 ± 0.05	0.0001
Average Sucrose (g)	89.16 ± 0.21	43.89 ± 0.22	52.70 ± 0.21	0.0001
Average Lactose (g)	5.60 ± 0.59	5.17 ± 0.44	5.17 ± 0.44	0.942
Average Fibers (g)	28.09 ± 0.18	18.02 ± 0.10	21.52 ± 0.20	0.0001
Alcohol (yes), n (%)	22 (23.9%)	4 (14.3%)	6 (31.6%)	0.918
Vitamin D supplementation (yes), n (%)	15 (14.9%)	13 (46.4%)	5 (26.3%)	0.006

Table 2. Energy Intake, Macronutrients and Micronutrients Per Day in Controls, IBD Patients in Remission and IBD Patients with Active Disease.

CONCLUSION

Difference in protein consumption was only significant between controls and IBD patients in remission. Differences in diet between patients with IBD and controls could be associated with nutritional restrictions patients impose on themselves. In contrast, consumption of PUFAs was associated with active disease in IBD patients, which concurs with the available literature. This study could serve as a steppingstone for future prospective and experimental studies that could inform nutritional rehabilitation for IBD patients.