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## Legend to supplementary figures

### Figure S1 Details of ibs constant-care application

Left panel: Main menu with the application components. Right panel: The application shows the registration status and guides patients through the missing registrations.

The application is a secured personal webpage with a username and password. It contains educational material about IBS, treatment options and the web-monitoring part of the IBS-SSS and IBS-QOL scores presented in 'traffic light' (TL) colours (green-yellow-red). Furthermore it carries a web-ward round system applicable, for nurses or doctors, and includes ranking patients by colour according to severity of IBS symptoms. The similar application has previously been used in IBS patients and this method has been shown to improve abdominal symptoms in IBS patients<sup>16,36</sup>. All patients were, after a one-hour educational session in the application use, required to complete their IBS-SSS and IBS-QOL once a week during the six-wk trial. For the research purpose registered data in the database were automatically linked to the Excel export function, allowing statistical analysis.

### Figure S2 Concept of [www.ibs.constant-care.dk](http://www.ibs.constant-care.dk)

A self-managed web-monitoring application of the disease severity in patients with irritable bowel syndrome. Example of patient web-registry of irritable bowel syndrome (IBS) symptom severity score (IBS-SSS). Y-axis: IBS-SSS score which ranges from 0-500 points. Green=remission and/or mild (0-175), yellow=moderate disease severity (175-300) and red=severe disease severity (>300). X-axis: Time weeks

**Figure S3 Box plot of simple clinical colitis activity index (SCCAI) crude data in means ( $\pm$ SD), medians (range) for the normal diet and low FODMAP diet groups at 0 versus 6-week**

ND: normal diet; LFD: Low-FODMAP diet

Supplemental Digital Content 1: Table S1


**Table S1 Danish FFQ consisting of 11 tables of following categories of habitual foods**

	Products	Quantity/day					e.g.
1	Bread	1	2	3	4	≥5 slices	Danish rye bread
2	Cereals	1	2	3	4	≥5 dl	Cornflakes
3	Pasta/rice/grains	1	2	3	4	≥5 dl	Whole grain pasta
4	Meat/fish/Poultry	50	100	150	200	≥250 g	Chicken
5	Fats/oils	5	10	15	20	≥25 g	Butter
6	Beverages	1	2	3	4	≥5 glass	Juice
7	Fruits	1	2	3	4	≥5 pieces	Apples
8	Vegetables	100	200	300	400	≥500 g	Broccoli
9	Candy/Cakes	20	50	75	100	≥500 g	Biscuit
10	Dairy products	1-3	3-5	5-7	7-9	≥9 dl	Milk
11	Legumes/Nuts/Dried fruits	10-20	20-40	40-60	60-80	≥80 g	Chickpeas

## Supplemental Digital Content 2: Figure S1

Constant  
Care

Welcome  
Your personal Irritable Bowel Syndrome (IBS) homepage

Log Out 

Welcome

What is IBS

Alarm symptoms

Disease severity

IBS-SSS

IBS-QOL

Results

Treatment

Reommended treatment

Change of treatment

Factors worsening symptoms

Security

E-learning

Contact doctor


User administration

Users


Doctors

Data Export




Change Password



Assessing your disease severity

 Enter missing data

The table below shows your registration status  
Press "next" to be guided through missing questionnaires

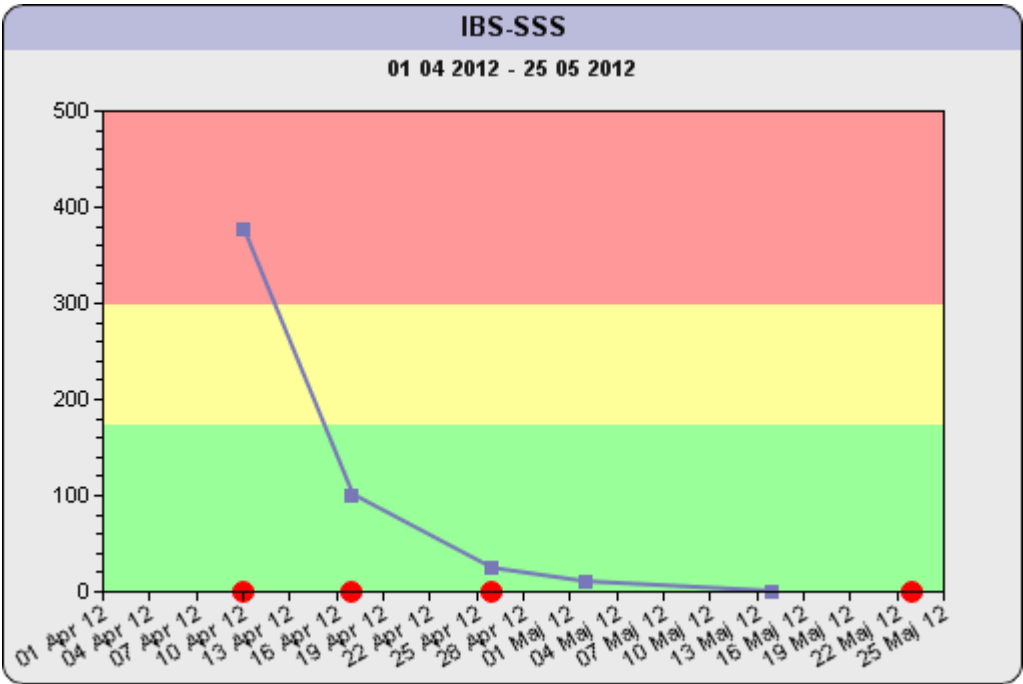
	Questionnaire	Days since last registration	Date for the last registration
	<a href="#">IBS-SSS</a>	15	12-12-2012
	<a href="#">IBS-QOL</a>	18	09-12-2012
	<a href="#">Treatment</a>	45	25-10-2012

Previuos

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Supplemental Digital Content 3: Figure S2



Supplemental Digital Content 4: Table S2

**Table S2 Factors with impact on the IBS-SSS subscore response in patients with IBD**

Effect	OR	Lower	Upper	p
IBS-SSS subscore 1 (pain intensity)				
IBD duration $\leq 5$ years	.23	.08	.65	<b>&lt;.01</b>
ND vs. LFD	.59	.21	.61	.30
IBS-SSS subscore 2 (pain duration)				
IBD duration $\leq 5$ years	.72	.20	.90	.50
ND vs. LFD	.33	.18	.89	<b>.03</b>
IBS-SSS subscore 3 (abdominal distension)				
IBD duration $\leq 5$ years	.38	.13	.08	.07
ND vs. LFD	.71	.25	.01	.52
IBS-SSS subscore 4 (stool frequency/consistency)				
IBD duration $\leq 5$ years	.79	.31	.02	.62
ND vs. LFD	.41	.16	.03	<b>.06</b>
IBS-SSS subscore 5 (interference with life)				
IBD duration $\leq 5$ years	.33	.12	.88	<b>.03</b>
ND vs. LFD	.68	.26	.80	.44

IBD: inflammatory bowel disease. IBS: irritable bowel syndrome. SSS: symptom severity score; OR (Odds Ratio=response). LFD: low FODMAP diet, ND: normal diet. Q: Question

**Bold: statistically significant results, i.e.  $p < .05$**

Supplemental Digital Content 5: Table S3

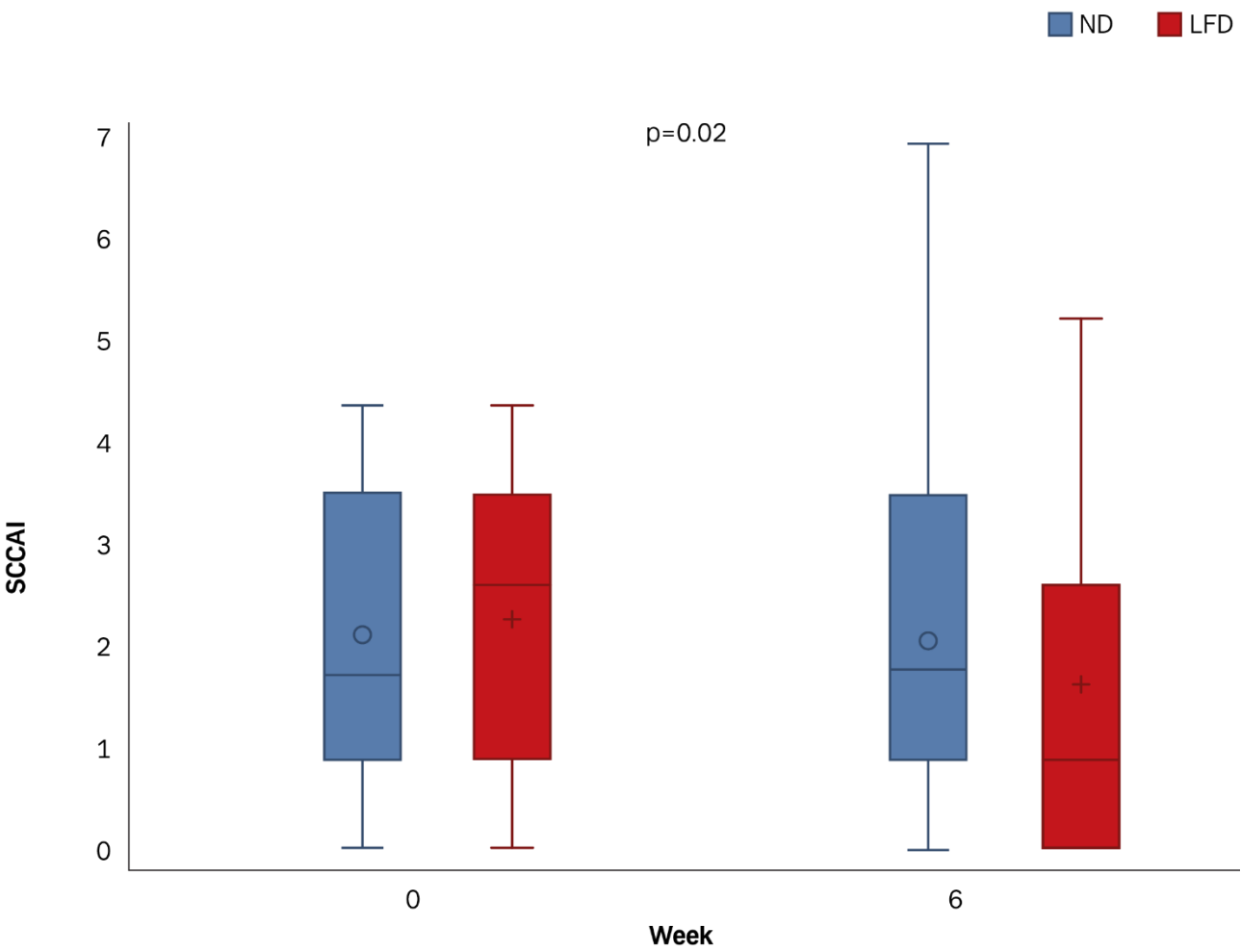
**Table S3 Response rates (IBS-SSS reduction) in different subgroups of IBD patients**

		Total numbers	Responders N (%)	P
Inflammatory bowel disease (IBD)		89		
	Low-FODMAP diet	37	30 (81)	<b>&lt;.01</b>
	Normal diet	41	19 (46)	
Ulcerative colitis		55		
	Low-FODMAP diet	26	18 (77)	.21
	Normal diet	29	16 (69)	
Crohn's Disease		23		
	Low-FODMAP diet	11	9 (82)	<b>.03</b>
	Normal diet	12	4 (67)	
IBD active		13		
	Low-FODMAP diet	6	4 (67)	.43
	Normal diet	7	6 (86)	
IBD Remission		65		
	Low-FODMAP diet	31	24 (77)	<b>&lt;.01</b>
	Normal diet	34	14 (41)	

Chi-Square Tests of the response rates in all IBD patients and their subgroups at 6-wk

**Bold: statistically significant results, i.e.  $p < .05$**

Supplemental Digital Content 6: Figure S3



Supplemental Digital Content 7: Table S4

**Table S4 Results of FC ( $\mu\text{g/g}$ ) and CRP ( $\text{mg/l}$ ) in geometric mean 95%CI**

	Week 0		Week 6		p
	Mean 95%CI	CV	Mean 95%CI	CV	
Faecal calprotectin (FC)					
Low-FODMAP diet (LFD)	65 (37-113)	1.7	53 (30-93)	1.6	.75
Normal diet (ND)	44 (23-83)	1.9	46 (27-81)	1.6	.46
P*					.41
C-reactive protein (CRP)					
LFD	2.8 (2.2-3.5)	0.6	2.7 (2.2-3.2)	0.6	.57
ND	2.6 (2.1-3.3)	0.7	2.2 (1.8-2.5)	<b>0.5</b>	<b>.04</b>
P*					.23

P: Wilcoxon signed rank test, comparison of paired samples within each treatment arm

\*P: Mann-Whitney U test comparison of change in outcomes between treatment arms at 6-wk

**Bold: statistically significant results, i.e.  $p < .05$**

CV: coefficient of variation

Supplemental Digital Content 8: Table S5

**Table S5 FODMAPs (g/day) at week 0 versus week 6 in IBD-IBS-like symptoms**

	Week 0		Week 6		p
	Mean (SD)	Median (range)	Mean (SD)	Median (range)	
Low-FODMAP diet (LFD)	27.4 (15.5)	24 (9-81)	6.1 (10.2)	2 (0-49)	<b>.01</b>
Normal diet (ND)	27.8 (12.8)	26 (4-58)	26.4 (13.6)	24 (2-68)	.35
*P	.53		<b>.04</b>		

P: Wilcoxon signed rank test, comparison of paired samples 0 vs 6-wk.

\*P: Mann-Whitney U test comparison of outcomes *between treatment* groups at 6-wk

**Bold: statistically significant results, i.e.  $p < .05$**