THE CLINICAL IMPACT OF FIBER SUPPLEMENTATION ON CARDIO-VASCULAR RISK PARAMETERS IN TYPE-2 DIABETES

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Introduction

- Diets high in soluble fiber are associated with lower cholesterol levels.
- The advised level of fiber, 30 grams per day, is difficult to achieve through diet alone.
- Bios Life 2 is a patented fiber drink mix, designed to lower cholesterol.

Objectives

 To study the lipid lowering potential of Bios Life 2 in Type-2 diabetics.

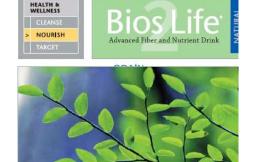
Study design

- Open label study with 78 Type-2 Diabetics (42 male, 36 female) with average age 59 years.
- Subjects took 10 15 grams of Bios Life 2, in 5 grams portions 10 minutes prior to a meal.
- Baseline and follow-up (90 days) measurements of HbA1c, FBG, PPBG, Tot.Chol., LDL, HDL, TG, and weight.
- Statistical analysis with paired Student's T-test.

Results

250 _T						
200 -						
Total						
Chol. ¹⁰⁰						
^{mg/dL} 50 -						
0						
160						
140 -						
120 -						
100 -						
60 - ma/dL 40 -						
mg/dL 40 - 20 -						
0						
70 -						
60 -	<u></u>					
50 -						
30 40 -						
20 - mg/dL 10 -						
10						
0 -						
250 -						
200 -						
150 -	*					
TG 100 -						
100						
50 - mg/dL						
0 -						
Baseline Follow-up						

Baseline Follow-up Mean ± SEM



Discussion

- Increasing soluble fiber intake with Bios Life 2 significantly reduces lipid parameters in Type-2 diabetics.
- Mechanism is through bile acid sequestration.
- Same mechanism reduces glucose levels through inhibition of carbohydrate uptake. This results in significant reduction of HbA1c.

Conclusion

Bios Life 2 is a very beneficial fiber drink mix for Type-2 diabetics and people with high cholesterol in general, who want to reduce cholesterol in a natural way.

References

Sprecher, et al, Metabolism (2002),
51, 1166.

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Parameter	Unit	t=0 ±	t=90	Δ	p-value
		SEM	±		
			SEM		
Total Chol	mg/dL	215.5	179.5	- 36.0	p < 0.000001
LDL	mg/dL	129.2	87.4	- 41.8	p < 0.000001
HDL	mg/dL	43.3	59.3	+ 16.0	p < 0.000001
Triglycerides	mg/dL	214.8	164.1	- 50.7	p < 0.000001
Fasting BG	mg/dL	173.7	153.3	- 20.4	p < 0.001
Post-	mg/dL	278.1	234.4	- 43.7	p < 0.0001
prandial BG	-				-
HbA1c	%	9.03	8.15	- 0.88	p < 0.001
Systolic BP	mmHg	131.3	127.2	- 4.1	p < 0.000001
Diastolic BP	mmHg	82.7	81.2	- 1.5	p < 0.05
Weight	lb	182.1	175.4	- 6.7	ns