

1. Carbohydrate Digestion

A. Test for Starch

Contents before Incubation	Lugol's Test Results (presence of polysaccharides after incubation)								AVERAGE
	Grp1	Grp 2	Grp3	Grp4	Grp5	Grp6	Grp7	Grp8	
1. Starch + Water	1	0	1	1	1	1	1		0.8
2. Starch + Saliva	0	1	0	0	0	0	0		0.2
3. Starch + Saliva + HCl	1	0	0	1	1	1	1		0.7
4. Starch + Boiled Saliva	1	1	1	0	1	1	1		0.8

	starch	Sugar
Water	0.8	0.0
Saliva	0.2	2.8
Saliva + HCl	0.7	1.0
Boiled Saliva	0.8	1.7

B. Test for Sugars

Contents before Incubation	Benedict's Test Results (presence of reducing sugars after incubation)								AVERAGE
	Grp1	Grp 2	Grp3	Grp4	Grp5	Grp6	Grp7	Grp8	
1. Starch + Water	0	0	0	0	0	0	0		0.0
2. Starch + Saliva	3	3	2	3	3	3	3		2.8
3. Starch + Saliva + HCl	2	0	3	1	0	1	1		1.0
4. Starch + Boiled Saliva	1	2	1	2	2	2	1		1.7

2. Protein Digestion

Contents before Incubation	Appearance of egg white (protein) after incubation.								AVERAGE
	Grp1	Grp 2	Grp3	Grp4	Grp5	Grp6	Grp7	Grp8	
1. Protein + HCl at 37_C	2	0	0	0	1	0	0	0	0.1
2. Protein + Pepsin at 37_C	1	2	1	1	2	1	0	0	1.0
3. Protein + Pepsin + HCl at 37_C	1	2	3	3	1	2	3	2	2.3
4. Protein + Pepsin + HCl at 0_C	0	1	0	3	0	0	2	1	1.0

HCl	0.1
Pepsin	1.0
Pepsin + HCl	2.3
Pepsin + HCl -	1.0

3. Lipid Digestion

A. Milk + Bile Salts

Contents before Incubation	Measured pH of Milk + Bile Salts Solution								AVERAGE
	Grp1	Grp 2	Grp3	Grp4	Grp5	Grp6	Grp7	Grp8	
0 seconds	6.5	6.5	6.5	6.5	6.5	6.0	6.5	6.5	6.4
1 minute	6	6.5	6.4	6.5	6.5	6.0	6.5	6.5	6.4
2 minutes	6.5	6.5	6.5	6.5	6.5	6.0	6.5	6.5	6.4
3 minutes	6.5	6.5	6.5	6.5	6.5	6.0	6.5	6.5	6.4
5 minutes	6.5	6.5	6.5	6.5	6.5	6.0	6.5	6.5	6.4
10 minutes	6.5	6.5	6.5	6.5	6.5	6.0	6.5	6.5	6.4
20 minutes	6	6.5	6.5	6.5	6.5	6.0	6.5	6.5	6.4
30 minutes	6.5	6.5	6.5	6.5	6.5	6.0	6.5	6.5	6.4

B. Milk + Pancreatin Solution

Contents before Incubation	Measured pH of Milk + Pancreatin Solution								AVERAGE
	Grp1	Grp 2	Grp3	Grp4	Grp5	Grp6	Grp7	Grp8	
0 seconds	5.5	6.5	6.0	6.5	6.0	6.0	6.5	6.5	6.3
1 minute	6	6.5	6.0	6.0	6.0	6.0	6.5	6.5	6.2
2 minutes	6	6.5	6.0	6.0	6.0	6.0	6.5	6.5	6.2
3 minutes	6	6.5	5.5	6.0	6.0	6.0	6.0	6.5	6.1
5 minutes	6	6.5	5.5	6.0	6.0	6.0	6.0	6.5	6.1
10 minutes	6	6.3	5.4	6.0	6.0	5.8	6.0	6.5	6.0
20 minutes	5.5	6.0	5.4	6.0	6.0	5.5	6.0	6.0	5.8
30 minutes	6	6.0	5.4	5.5	6.0	5.3	6.0	6.0	5.7

time (mins)	Milk + Bile	Milk + Lipase	Milk + Bile + Lip
0	6.4	6.3	6.2
1	6.4	6.2	6.1
2	6.4	6.2	6.0
3	6.4	6.1	6.0
5	6.4	6.1	5.8
10	6.4	6.0	5.8
20	6.4	5.8	5.7
30	6.4	5.7	5.4

C. Milk + Bile Salts + Pancreatin Solution

Contents before Incubation	Measured pH of Milk + Bile Salts + Pancreatin Solution								AVERAGE
	Grp1	Grp 2	Grp3	Grp4	Grp5	Grp6	Grp7	Grp8	
0 seconds	6.5	6.5	5.7	6.5	6.0	6.0	6.5	6.5	6.2
1 minute	6	6.5	5.7	6.0	6.0	6.0	6.0	6.5	6.1
2 minutes	5.5	6.5	5.7	6.0	6.0	5.5	6.0	6.5	6.0
3 minutes	5.5	6.5	5.3	6.0	6.0	5.5	6.0	6.5	6.0
5 minutes	5.5	6.0	5.2	6.0	6.0	5.5	5.5	6.5	5.8
10 minutes	5.5	6.0	5.1	6.0	6.0	5.5	5.5	6.5	5.8
20 minutes	5.5	5.8	5.1	6.0	6.0	5.3	5.5	6.0	5.7
30 minutes	5.5	5.5	5.1	5.5	5.5	5.0	5.5	5.5	5.4