

<b>Enzymes (U g<sup>-1</sup> min<sup>-1</sup>)</b>
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AMYLASE

	Lab-fed shark 1	Lab-fed shark 2	Lab-fed shark 3	Lab-fed shark 4	Lab-fed shark 5	mean	stnd dev	PI AVG
Proximal Intestine	33.7037	30.25463	23.588	33.42593	34.2014	31.0347222	3.97320684	32.4572308
Proximal Intestine	42.37037	32.87037	33.3704	35.37037	29.2014	34.6365741	4.35003557	
Proximal Intestine	31.98676	30.08676	33.5968	31.98549	30.8462	31.700396	1.33162816	
Spiral Intestine	55.76389	46.04167	41.6898	37.63889	42.1759	44.662037	6.88284018	SI AVG
Spiral Intestine	33.5447	38.7583	39.0007	39.4372	40.0047	38.14912	2.61721701	40.8786763
Spiral Intestine	36.54433	38.50003	39.0386	48.54872	36.4927	39.824872	5.00859785	
Distal Intestine	17.12963	26.01852	25.8796	29.58333	19.5926	23.6407407	5.11768817	DI AVG
Distal Intestine	16.676	14.786	19.698	14.235	17.928	16.6646	2.24888412	18.4478376
Distal Intestine	12.46788	16.28474	13.4726	15.00183	17.9638	15.038172	2.18928853	
	Wild shark 1	Wild shark 2	Wild shark 3	Wild shark 4		mean	stnd dev	PI AVG
Proximal Intestine	30.24074	30.79861	30.5787	31.41667		30.7586806	0.49503989	31.6031898
Proximal Intestine	30.24074	33.79861	35.5787	31.41667		32.7586806	2.3926978	
Proximal Intestine	30.79006	30.79	31.1787	32.41007		31.2922081	0.76743175	
Spiral Intestine	39.40972	47.27315	31.0069	40.02315		39.4282407	6.65369725	SI AVG
Spiral Intestine	40.40972	36.27315	37.1694	34.23148		37.0209491	2.57204005	38.3983796
Spiral Intestine	34.40972	41.27315	39.0694	40.23148		38.7459491	3.02770839	
Distal Intestine	15.91667	19.85185	18.7176	23.31019		19.4490741	3.05959563	DI AVG
Distal Intestine	19.27967	17.95185	17.7176	10.00185		16.2377407	4.21377748	16.8077963
Distal Intestine	11.91667	12.85185	15.1759	19.00185		14.7365741	3.15645794	

MALTASE

	Lab-fed shark 1	Lab-fed shark 2	Lab-fed shark 3	Lab-fed shark 4	Lab-fed shark 5	mean	stnd dev	PI AVG
Proximal Intestine	0.300407	0.407901	0.31179	0.324101	0.34457	0.33775408	0.04249274	0.3601673
Proximal Intestine	0.302428	0.417986	0.45575	0.359874	0.38275	0.38375642	0.05818088	
Proximal Intestine	0.332407	0.407986	0.35579	0.354167	0.34461	0.3589914	0.02892908	
Spiral Intestine	0.394474	0.389874	0.41007	0.402315	0.42327	0.40400123	0.0132429	SI AVG

Spiral Intestine	0.273728	0.412476	0.50069	0.462315	0.45576	0.42099531	0.08807397	0.40742135
Spiral Intestine	0.404097	0.402731	0.39694	0.392556	0.39001	0.39726752	0.00615416	
Distal Intestine	0.329164	0.318557	0.27176	0.331019	0.31144	0.31238714	0.02407385	DI AVG
Distal Intestine	0.227967	0.299519	0.27718	0.210002	0.20049	0.24302984	0.04325688	0.22952554
Distal Intestine	0.119136	0.12853	0.19176	0.100019	0.12635	0.13315963	0.03462893	
	Wild shark	Wild	Wild	Wild shark				
	1	shark 2	shark 3	4	mean	stnd dev	PI AVG	
Proximal Intestine	0.324536	0.394778	0.33588	0.304763	0.3399901	0.03872266	0.36275604	
Proximal Intestine	0.304938	0.433375	0.37385	0.391736	0.37597371	0.05352254		
Proximal Intestine	0.282004	0.439476	0.44927	0.318463	0.37230432	0.08463572		
Spiral Intestine	0.243275	0.314953	0.50484	0.429376	0.37311042	0.11655831	SI AVG	
Spiral Intestine	0.414827	0.305333	0.33597	0.323498	0.34490801	0.04828082	0.3512302	
Spiral Intestine	0.284726	0.423626	0.30486	0.329474	0.33567216	0.06142491		
Distal Intestine	0.338574	0.324857	0.24857	0.314934	0.30673457	0.03996693	DI AVG	
Distal Intestine	0.204836	0.299519	0.27718	0.210002	0.24788298	0.04765277	0.23673139	
Distal Intestine	0.119136	0.184762	0.18476	0.133645	0.15557662	0.03421741		

## TRYPsin

	Lab-fed	Lab-fed	Lab-fed	Lab-fed	Lab-fed			
	shark 1	shark 2	shark 3	shark 4	shark 5	mean	stnd dev	PI AVG
Proximal Intestine	0.477786	0.490044	0.45383	0.459811	0.45498	0.46729026	0.0159415	0.4346636
Proximal Intestine	0.419473	0.474833	0.41094	0.454732	0.45928	0.4438513	0.0273587	
Proximal Intestine	0.377654	0.394423	0.37463	0.398263	0.41928	0.39284924	0.01798262	
Spiral Intestine	0.314948	0.403827	0.28475	0.282715	0.25736	0.30872092	0.05694805	SI AVG
Spiral Intestine	0.308765	0.414925	0.35929	0.405836	0.36573	0.37090889	0.04237044	0.32185949
Spiral Intestine	0.29472	0.319472	0.28425	0.263846	0.26745	0.28594864	0.02255153	
Distal Intestine	0.214846	0.224846	0.27485	0.284625	0.20985	0.24180235	0.03521708	DI AVG
Distal Intestine	0.229485	0.193846	0.17355	0.294846	0.23473	0.22528969	0.04639755	0.21999043
Distal Intestine	0.204735	0.229485	0.21947	0.209476	0.21028	0.21469116	0.00984194	
	Wild shark	Wild	Wild	Wild shark				
	1	shark 2	shark 3	4	mean	stnd dev	PI AVG	
Proximal Intestine	0.443854	0.447366	0.47465	0.499485	0.46633906	0.02603414	0.46283526	

Proximal Intestine	0.474857	0.458437	0.45394	0.450093		0.45933146	0.01089788	
Proximal Intestine	0.354838	0.384726	0.35357	0.339576		0.35817825	0.01900184	
Spiral Intestine	0.274645	0.310385	0.27465	0.238426		0.27452717	0.0293772	SI AVG
Spiral Intestine	0.284756	0.318476	0.34584	0.304959		0.31350707	0.02562301	0.29037796
Spiral Intestine	0.258376	0.294856	0.24112	0.274645		0.26724885	0.0229377	
Distal Intestine	0.198474	0.194958	0.17295	0.194821		0.19030033	0.01169078	DI AVG
Distal Intestine	0.167363	0.193847	0.17425	0.184645		0.18002723	0.01163353	0.18306649
Distal Intestine	0.157295	0.174873	0.18847	0.194848		0.17887191	0.01662293	

#### AMINOPEPTIDASE

	Lab-fed shark 1	Lab-fed shark 2	Lab-fed shark 3	Lab-fed shark 4	Lab-fed shark 5	mean	stnd dev	PI AVG
Proximal Intestine	29.48574	26.47463	29.4857	26.48574	32.9586	28.9780818	2.68509002	30.6603899
Proximal Intestine	31.95737	29.48574	28.5969	27.98777	29.4756	29.5006726	1.51178245	
Proximal Intestine	36.98799	36.12398	37.4959	29.98103	26.9232	33.5024153	4.76066528	
Spiral Intestine	80.82395	83.94856	77.5947	79.94876	79.9486	80.4529146	2.29319315	SI AVG
Spiral Intestine	69.02937	66.85757	68.9487	65.59826	69.8553	68.0578505	1.76484375	72.6973951
Spiral Intestine	68.98463	69.00982	69.9387	69.98917	69.9847	69.5814201	0.53373664	
Distal Intestine	60.49486	58.69847	56.6948	58.93827	54.5939	57.8840622	2.28202106	DI AVG
Distal Intestine	54.98275	52.59584	49.2928	48.59382	42.5938	49.6118149	4.69418537	50.7770727
Distal Intestine	42.59584	46.69484	45.6984	40.59383	48.5938	44.8353408	3.21459906	
	Wild shark 1	Wild shark 2	Wild shark 3	Wild shark 4		mean	stnd dev	PI AVG
Proximal Intestine	25.40596	27.59383	27.4954	29.45837		27.4883798	1.65615228	28.8458318
Proximal Intestine	29.53773	26.49677	30.5857	31.39483		29.5037657	2.14397823	
Proximal Intestine	31.59584	31.49246	28.4973	26.59584		29.5453498	2.43542322	
Spiral Intestine	83.98723	81.98158	80.9416	78.23498		81.2863396	2.39498608	SI AVG
Spiral Intestine	67.34571	70.34072	67.7666	68.67635		68.5323402	1.3273384	74.9115867
Spiral Intestine	74.67658	72.58464	78.9474	73.45575		74.9160802	2.82115859	
Distal Intestine	62.48474	59.68736	58.6847	54.68736		58.8860494	3.2281134	DI AVG
Distal Intestine	46.68474	50.69844	44.5877	52.49584		48.6166689	3.62155275	50.1998351
Distal Intestine	44.59876	47.59376	39.5958	40.59878		43.096787	3.69573534	

## LIPASE

	Lab-fed shark 1	Lab-fed shark 2	Lab-fed shark 3	Lab-fed shark 4	Lab-fed shark 5	mean	stnd dev	PI AVG
Proximal Intestine	0.837464	0.636257	0.78363	1.383725	0.76454	0.88112219	0.29050483	1.01260549
Proximal Intestine	1.475635	1.000395	0.74635	0.798736	0.55746	0.9157168	0.35049702	
Proximal Intestine	1.009284	0.938373	1.76855	1.484736	1.00395	1.24097748	0.36714546	
Spiral Intestine	3.000969	2.948575	2.04948	2.586746	2.70235	2.65762421	0.38059042	SI AVG
Spiral Intestine	2.598764	1.092837	2.39485	2.822395	2.01947	2.1856633	0.67855085	2.35222952
Spiral Intestine	2.484737	2.022123	2.19584	2.229837	2.13446	2.21340105	0.17104064	
Distal Intestine	1.098064	2.096537	1.07537	2.168655	2.00001	1.68772622	0.5519562	DI AVG
Distal Intestine	1.087613	1.500877	1.92468	1.567241	1.67937	1.55195511	0.30561914	1.56787877
Distal Intestine	1.009011	1.87621	1.54324	1.356783	1.53453	1.46395499	0.3161016	
	Wild shark 1	Wild shark 2	Wild shark 3	Wild shark 4		mean	stnd dev	PI AVG
Proximal Intestine	0.349877	0.678326	0.76529	0.567843		0.59033297	0.17951461	0.75026951
Proximal Intestine	0.98761	0.762149	0.67542	0.707099		0.78307057	0.14098864	
Proximal Intestine	1.245623	0.605948	0.79857	0.859474		0.877405	0.26820965	
Spiral Intestine	2.40989	1.934568	2.45032	2.345853		2.28515867	0.23765177	SI AVG
Spiral Intestine	2.948755	2.039484	2.54756	2.456734		2.49813409	0.37308461	2.36856633
Spiral Intestine	2.000194	2.33455	2.65438	2.300499		2.32240622	0.26749245	
Distal Intestine	1.389345	1.313249	1.17544	1.301032		1.29476656	0.08862816	DI AVG
Distal Intestine	1.576486	1.172094	1.94726	1.599383		1.57380663	0.31702	1.42449191
Distal Intestine	1.459847	1.873652	1.09284	1.193274		1.40490254	0.34876798	

BETA-  
GLUCOSIDASE

	Lab-fed shark 1	Lab-fed shark 2	Lab-fed shark 3	Lab-fed shark 4	Lab-fed shark 5	mean	stnd dev	PI AVG
Proximal Intestine	0	0	0	0	0	0	0	0
Proximal Intestine	0	0	0	0	0	0	0	0
Proximal Intestine	0	0	0	0	0	0	0	0
Spiral Intestine	0.000124	0.001348	0.00048	0.000385	0.00098	0.00066523	0.00044111	SI AVG

Spiral Intestine	0.002476	0.001648	0.00124	0.001985	0.00192	0.0018536	0.00040715	0.00148167
Spiral Intestine	0.002002	0.001654	0.00174	0.002399	0.00184	0.00192617	0.0002631	
Distal Intestine	0.005009	0.003987	0.00499	0.00679	0.00568	0.00529054	0.00092424	DI AVG
Distal Intestine	0.00251	0.002544	0.00291	0.002765	0.00287	0.00272017	0.00016515	0.00336258
Distal Intestine	0.002092	0.001483	0.00229	0.002394	0.00212	0.00207701	0.00031723	
	Wild shark 1	Wild shark 2	Wild shark 3	Wild shark 4		mean	stnd dev	PI AVG
Proximal Intestine	0	0	0	0		0	0	0
Proximal Intestine	0	0	0	0		0	0	
Proximal Intestine	0	0	0	0		0	0	
Spiral Intestine	0.000101	0.001985	0.00024	0.000335		0.00066485	0.00088513	SI AVG
Spiral Intestine	0.002732	0.001157	0.00157	0.002008		0.00186604	0.00067392	0.00149493
Spiral Intestine	0.002988	0.001021	0.0017	0.002108		0.00195389	0.00082195	
Distal Intestine	0.005999	0.004	0.00499	0.00699		0.00549466	0.00128828	DI AVG
Distal Intestine	0.00271	0.002698	0.00293	0.002798		0.00278463	0.00010801	0.00345263
Distal Intestine	0.002199	0.001401	0.00236	0.00235		0.00207861	0.00045759	

### Digestibility (%)

	Protein	Lipid	Soluble Carbohyd rate	Neutral Detergent Fiber	Acid Detergent Fiber	Total Organic Matter
Lab-Fed Shark 1	91	50	85	50.94098	40.0346	53
Lab-Fed Shark 2	96	62	81	50.08654	50.1191	47
Lab-Fed Shark 3	90	47	77	52.22359	43.6738	49
Lab-Fed Shark 4	88	44	78	50.73729	40.3875	50
Lab-Fed Shark 5	94	54	79	57.30572	42.9486	51

	Average	Stnd Dev
Protein	92	3
Lipid	51	7
Soluble Carbohydrate	80	3

Neutral Detergent Fiber	52	3
Acid Detergent Fiber	43	4
Total Organic Matter	50	2