

8 Appendix

Example of statistic analysis

Tests der Zwischensubjekteffekte

Tab. 1 Abhängige Variable: Corneum

Quelle		Quadratsumme vom Typ III	df	Mittel der Quadrate	F	Signifikanz
Konstanter Term	Hypothese	384230,246	1	384230,246	356,730	,000
	Fehler	17233,441	16	1077,090 (a)		
Group	Hypothese	47650,894	7	6807,271	6,320	,001
	Fehler	17233,441	16	1077,090 (a)		
Animal(Group)	Hypothese	17233,441	16	1077,090	5,744	,000
	Fehler	9000,582	48	187,512 (b)		

a MS(Animal(Group))

b MS(Fehler)

(I) Group	(J) Group	Mittlere Differenz (I-J)	Standardfehler	Signifikanz	95% Konfidenzintervall	
					Untergrenze	Obergrenze
CF0W	CF2D	12,2572	6,45518	,819	-13,1175	37,6320
	CF4D	12,7555	6,45518	,786	-12,6193	38,1302
	CF1W	2,7720	6,45518	1,000	-22,6027	28,1467
	CF2W	-15,8023	6,45518	,547	-41,1771	9,5724
	CF4W	-40,3462(*)	6,45518	,000	-65,7210	-14,9715
	CF6W	-28,6749(*)	6,45518	,015	-54,0496	-3,3002
	CF12W	-64,0964(*)	6,45518	,000	-89,4712	-38,7217

CF2D	CF0W	-12,2572	6,45518	,819	-37,6320	13,1175
	CF4D	,4983	6,45518	1,000	-24,8765	25,8730
	CF1W	-9,4852	6,45518	,947	-34,8600	15,8895
	CF2W	-28,0596(*)	6,45518	,019	-53,4343	-2,6848
	CF4W	-52,6034(*)	6,45518	,000	-77,9782	-27,2287
	CF6W	-40,9321(*)	6,45518	,000	-66,3068	-15,5574
	CF12W	-76,3537(*)	6,45518	,000	-101,7284	-50,9789
CF4D	CF0W	-12,7555	6,45518	,786	-38,1302	12,6193
	CF2D	-,4983	6,45518	1,000	-25,8730	24,8765
	CF1W	-9,9835	6,45518	,931	-35,3582	15,3913
	CF2W	-28,5578(*)	6,45518	,016	-53,9325	-3,1831
	CF4W	-53,1017(*)	6,45518	,000	-78,4764	-27,7270
	CF6W	-41,4304(*)	6,45518	,000	-66,8051	-16,0556
	CF12W	-76,8519(*)	6,45518	,000	-102,2267	-51,4772
CF1W	CF0W	-2,7720	6,45518	1,000	-28,1467	22,6027
	CF2D	9,4852	6,45518	,947	-15,8895	34,8600
	CF4D	9,9835	6,45518	,931	-15,3913	35,3582
	CF2W	-18,5743	6,45518	,330	-43,9491	6,8004
	CF4W	-43,1182(*)	6,45518	,000	-68,4930	-17,7435
	CF6W	-31,4469(*)	6,45518	,005	-56,8216	-6,0722
	CF12W	-66,8684(*)	6,45518	,000	-92,2432	-41,4937
CF2W	CF0W	15,8023	6,45518	,547	-9,5724	41,1771
	CF2D	28,0596(*)	6,45518	,019	2,6848	53,4343
	CF4D	28,5578(*)	6,45518	,016	3,1831	53,9325
	CF1W	18,5743	6,45518	,330	-6,8004	43,9491
	CF4W	-24,5439	6,45518	,066	-49,9186	,8308
	CF6W	-12,8726	6,45518	,778	-38,2473	12,5022
	CF12W	-48,2941(*)	6,45518	,000	-73,6688	-22,9194
CF4W	CF0W	40,3462(*)	6,45518	,000	14,9715	65,7210
	CF2D	52,6034(*)	6,45518	,000	27,2287	77,9782
	CF4D	53,1017(*)	6,45518	,000	27,7270	78,4764
	CF1W	43,1182(*)	6,45518	,000	17,7435	68,4930

	CF2W	24,5439	6,45518	,066	-,8308	49,9186
	CF6W	11,6713	6,45518	,854	-13,7034	37,0461
	CF12W	-23,7502	6,45518	,085	-49,1250	1,6245
CF6W	CF0W	28,6749(*)	6,45518	,015	3,3002	54,0496
	CF2D	40,9321(*)	6,45518	,000	15,5574	66,3068
	CF4D	41,4304(*)	6,45518	,000	16,0556	66,8051
	CF1W	31,4469(*)	6,45518	,005	6,0722	56,8216
	CF2W	12,8726	6,45518	,778	-12,5022	38,2473
	CF4W	-11,6713	6,45518	,854	-37,0461	13,7034
	CF12W	-35,4216(*)	6,45518	,001	-60,7963	-10,0468
CF12W	CF0W	64,0964(*)	6,45518	,000	38,7217	89,4712
	CF2D	76,3537(*)	6,45518	,000	50,9789	101,7284
	CF4D	76,8519(*)	6,45518	,000	51,4772	102,2267
	CF1W	66,8684(*)	6,45518	,000	41,4937	92,2432
	CF2W	48,2941(*)	6,45518	,000	22,9194	73,6688
	CF4W	23,7502	6,45518	,085	-1,6245	49,1250
	CF6W	35,4216(*)	6,45518	,001	10,0468	60,7963

Basiert auf beobachteten Mittelwerten.

* Die mittlere Differenz ist auf der Stufe ,05 signifikant.

VARIABLE LABELS C_Thick 'Corneum'

UNIANOVA

Thickness corn BY Group Animal

/RANDOM = Animal

/METHOD = SSTYPE (3)

/INTERCEPT = INCLUDE

/POSTHOC = Group (SCHEFFE)

/CRITERIA = ALPHA (.05)

/DESIGN = Group animal (group).

Tab. 2: Mean thickness of stratum (germinativum+granulosum)

Animal groups	Mean thickness of stratum (germinativum+granulosum) (μm)		
	Inter papillae	Base of papillae	Tip of papillae
CF0W	46,21 \pm 10,70	56,98 \pm 9,70	40,06 \pm 8,19
CF2D	62,41 \pm 6,73	70,43 \pm 7,85	53,09 \pm 11,09
CF4D	67,61 \pm 11,82	72,66 \pm 13,13	47,83 \pm 7,07
CF1W	60,65 \pm 11,13	68,28 \pm 22,66	66,48 \pm 12,33
CF2W	62,47 \pm 17,50	67,10 \pm 15,29	61,97 \pm 10,21
CF4W	56,22 \pm 14,32	59,28 \pm 17,15	55,38 \pm 10,71
CF6W	64,65 \pm 19,56	75,59 \pm 18,77	68,17 \pm 17,06
CF12W	48,22 \pm 13,00	51,56 \pm 16,08	55,46 \pm 14,66

Tab. 3: Mean thickness of stratum corneum

Animal groups	Mean thickness of stratum corneum (μm)		
	Inter papillae	Base of papillae	Tip of papillae
CF0W	19,28 \pm 6,52	21,60 \pm 10,39	17,04 \pm 5,08
CF2D	15,11 \pm 3,61	15,12 \pm 2,21	15,42 \pm 2,79
CF4D	15,34 \pm 5,77	15,44 \pm 3,45	14,37 \pm 2,31
CF1W	16,18 \pm 3,41	20,34 \pm 7,31	18,62 \pm 2,04
CF2W	22,76 \pm 9,35	28,37 \pm 14,98	22,59 \pm 5,26
CF4W	28,14 \pm 9,46	36,33 \pm 6,40	33,79 \pm 5,72
CF6W	26,29 \pm 7,40	32,38 \pm 10,26	27,92 \pm 6,62
CF12W	26,94 \pm 4,43	49,03 \pm 25,39	46,04 \pm 8,38

Tab. 4: Mean thickness of epithelium

Animal groups	Mean thickness of epithelium (μm)		
	Inter papillae	Base of papillae	Tip of papillae
CF0W	66,98 \pm 10,17	76,91 \pm 7,78	79,35 \pm 9,16
CF2D	83,80 \pm 10,92	97,48 \pm 11,27	96,77 \pm 10,43
CF4D	87,03 \pm 13,07	100,90 \pm 11,50	103,19 \pm 13,16
CF1W	95,11 \pm 17,85	114,34 \pm 21,54	118,54 \pm 7,54
CF2W	92,23 \pm 19,20	109,56 \pm 15,24	137,74 \pm 13,88
CF4W	92,40 \pm 12,82	104,87 \pm 18,05	132,67 \pm 17,70
CF6W	105,71 \pm 29,55	136,83 \pm 29,18	146,69 \pm 23,27
CF12W	80,13 \pm 17,60	100,55 \pm 19,81	139,02 \pm 31,68

Tab. 5: Mean length of papillary body and total surface of papillae

Animal groups	Mean length of papillary body (μm)	Mean of the total surface of papillae ($\text{mm}^2 / \text{cm}^2$ mucosa)
CF0W	$77,24 \pm 11,46$	$308,21 \pm 88,89$
CF2D	$80,61 \pm 8,51$	$734,86 \pm 154,81$
CF4D	$82,95 \pm 14,67$	$706,35 \pm 109,85$
CF1W	$89,47 \pm 4,72$	$630,17 \pm 244,49$
CF2W	$109,56 \pm 4,24$	$633,25 \pm 173,56$
CF4W	$106,76 \pm 8,14$	$1248,44 \pm 275,15$
CF6W	$94,33 \pm 10,03$	$997,55 \pm 123,05$
CF12W	$102,20 \pm 22,37$	$949,66 \pm 164,93$

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Selbständigkeitserklärung zur Dissertation

Hiermit bestätige ich, dass ich die vorliegende Arbeit selbständig angefertigt habe. Ich versichere, dass ich ausschließlich die angegebenen Quellen und Hilfen in Anspruch genommen habe.

Ferner erkläre ich, dass die Arbeit bisher in keinem anderen Promotionsverfahren angenommen oder abgelehnt worden ist.

Rasha Siddig