Fry Analysis

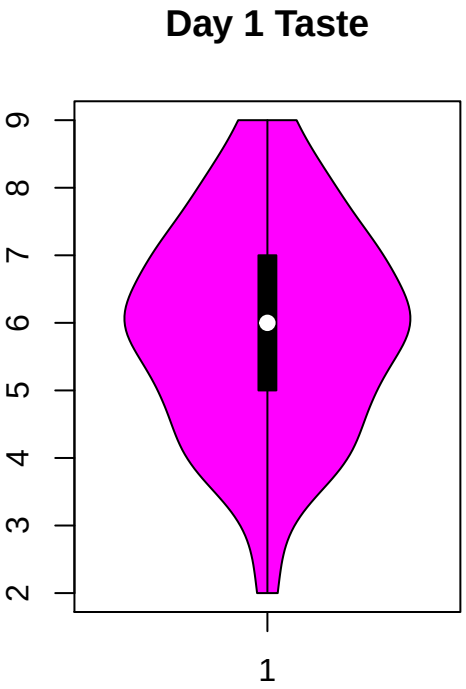
Ben Straub

9/29/2017

FIRST WEEK

Table 1: Linear Model for Day 1

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	-0.4371109	0.4880374	-0.8956504	0.3719447
Samp.2	0.0692324	0.0987342	0.7011996	0.4843180
Gender2	0.1758151	0.1047377	1.6786223	0.0954096
Age2	0.0638177	0.1423407	0.4483447	0.6545831
Age3	-0.0031547	0.2173152	-0.0145165	0.9884382
Age4	0.1843957	0.1497586	1.2312864	0.2202369
Age5	0.0239609	0.1542375	0.1553508	0.8767638
Temperature	0.1014147	0.0688803	1.4723320	0.1431288
Appearance	0.1018732	0.0470877	2.1634771	0.0321660
Color	0.0015805	0.0677257	0.0233373	0.9814137
Taste	0.6354350	0.0441688	14.3865289	0.0000000
Texture	0.2282765	0.0464256	4.9170429	0.0000024
Preference	-0.0144971	0.0648119	-0.2236792	0.8233261



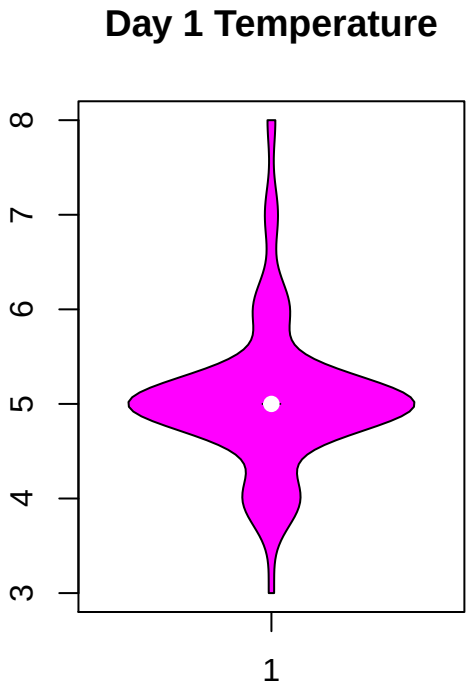
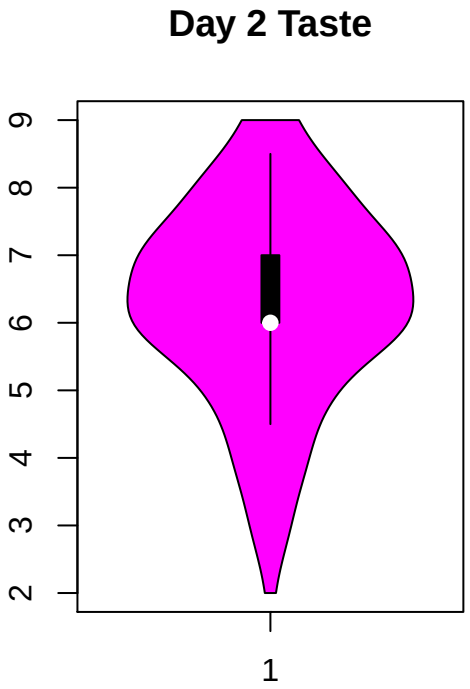


Table 2: Linear Model for Day 2

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	-0.0599247	0.4490581	-0.1334452	0.8940400
Samp.2	-0.0100391	0.0986552	-0.1017593	0.9190987
Gender2	0.0396303	0.1008755	0.3928635	0.6950399
Age2	0.1748490	0.1470456	1.1890798	0.2364956
Age3	-0.0480749	0.1734104	-0.2772316	0.7820263
Age4	0.2659660	0.1558099	1.7069901	0.0901229
Age5	0.1070449	0.1677043	0.6382955	0.5243626
Temperature	-0.0982688	0.0671539	-1.4633375	0.1456995
Appearance	0.1232721	0.0509104	2.4213565	0.0167911
Color	0.0596269	0.0665260	0.8962939	0.3716913
Taste	0.6155915	0.0528516	11.6475521	0.0000000
Texture	0.2620192	0.0523044	5.0095098	0.0000017
Preference	0.0681113	0.0765212	0.8900969	0.3749973



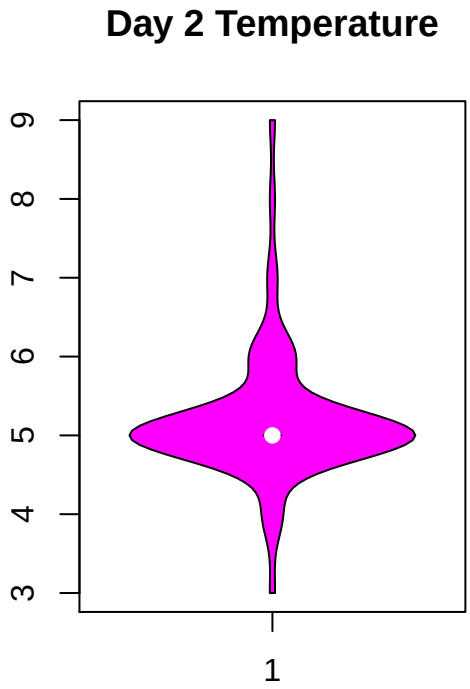
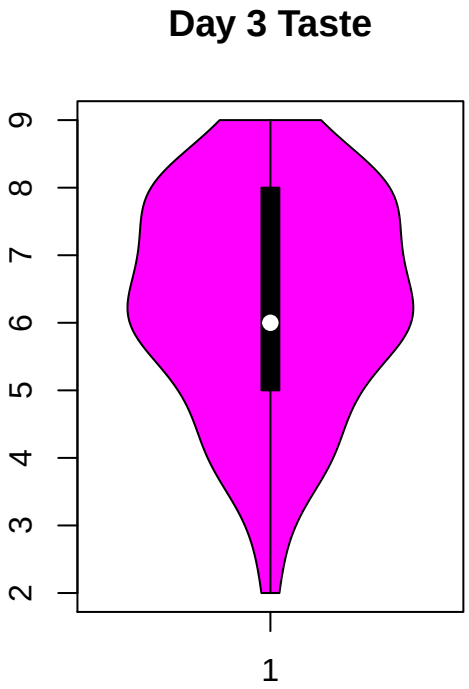


Table 3: Linear Model for Day 3

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	0.6575335	0.5361658	1.2263622	0.2222292
Samp.2	-0.0746083	0.1082727	-0.6890784	0.4919743
Gender2	-0.0109861	0.1168235	-0.0940398	0.9252190
Age2	0.1116300	0.1661490	0.6718668	0.5028339
Age3	0.0042198	0.1860472	0.0226813	0.9819385
Age4	0.0294945	0.1818435	0.1621969	0.8713969
Age5	0.1575344	0.1826326	0.8625754	0.3899236
Temperature	0.0457344	0.0836532	0.5467141	0.5854913
Appearance	0.1093184	0.0556117	1.9657451	0.0514112
Color	-0.0566555	0.0736578	-0.7691717	0.4431552
Taste	0.5627544	0.0555124	10.1374565	0.0000000
Texture	0.2501694	0.0567551	4.4078721	0.0000213
Preference	-0.0562464	0.0777556	-0.7233749	0.4707199



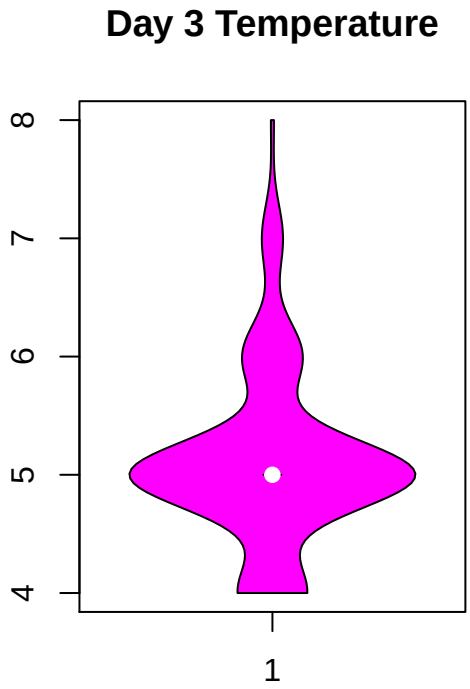
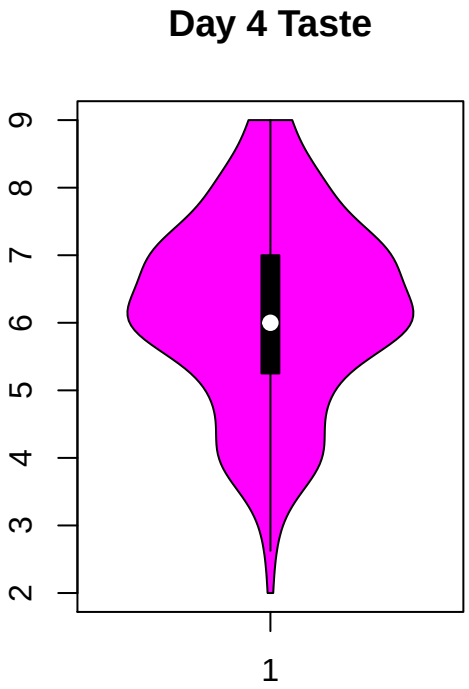


Table 4: Linear Model for Day 4

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	0.3351602	0.4460292	0.7514309	0.4533913
Samp.2	-0.0468081	0.0865403	-0.5408828	0.5892684
Gender2	-0.0136004	0.0932676	-0.1458211	0.8842285
Age2	-0.1323931	0.1157514	-1.1437718	0.2542628
Age3	0.1689452	0.2338687	0.7223936	0.4710059
Age4	0.1416371	0.1340644	1.0564856	0.2921863
Age5	-0.0954159	0.1462296	-0.6525075	0.5149204
Temperature	0.0241623	0.0571498	0.4227894	0.6729621
Appearance	0.0993286	0.0445123	2.2314854	0.0269042
Color	0.0085830	0.0515731	0.1664232	0.8680139
Taste	0.6316815	0.0457106	13.8191574	0.0000000
Texture	0.2277965	0.0398888	5.7107836	0.0000000
Preference	-0.0446541	0.0594130	-0.7515876	0.4532973



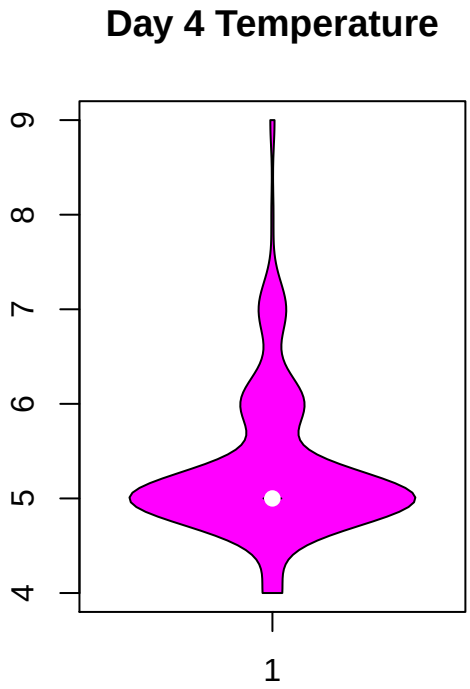
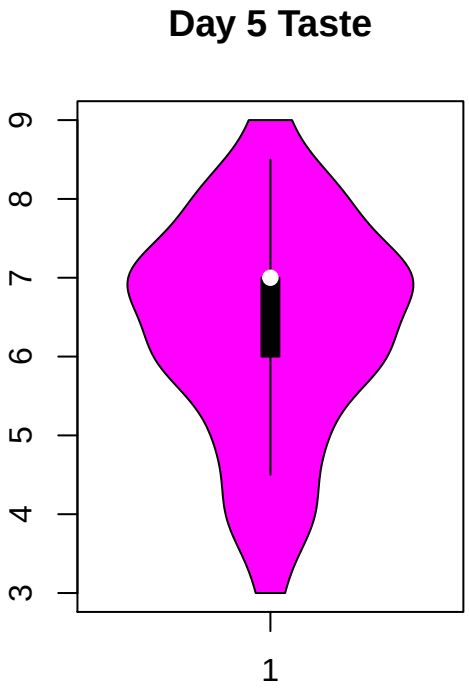


Table 5: Linear Model for Day 5

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	-0.2687048	0.4847104	-0.5543617	0.5799937
Samp.2	0.1029749	0.0927197	1.1106049	0.2681644
Gender2	-0.1962398	0.1025242	-1.9140832	0.0571365
Age2	-0.0415110	0.1211698	-0.3425852	0.7322953
Age3	-0.1661842	0.1879195	-0.8843371	0.3776499
Age4	-0.1107261	0.1656621	-0.6683851	0.5047120
Age5	-0.1357338	0.1566298	-0.8665898	0.3872773
Temperature	0.0359945	0.0586287	0.6139405	0.5400008
Appearance	0.1559477	0.0439964	3.5445598	0.0004968
Color	0.1070906	0.0718476	1.4905252	0.1377710
Taste	0.5446571	0.0478410	11.3847288	0.0000000
Texture	0.2661430	0.0421950	6.3074599	0.0000000
Preference	-0.0376855	0.0623027	-0.6048772	0.5459939



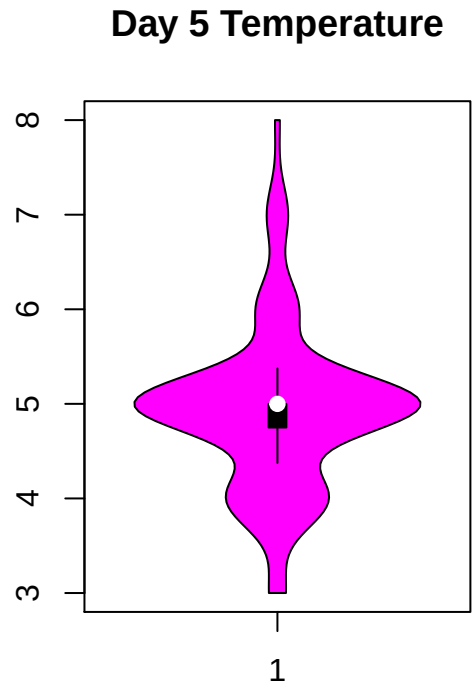


Table 6: Gender 1st Week

	Male	Female
Day 1	58	98
Day 2	74	74
Day 3	62	84
Day 4	94	96
Day 5	80	120
Total	368	472

Table 7: Age of Oil 1st Week

	Age 1	Age 2	Age 3	Age 4	Age 5
Day 1	42	38	10	34	32
Day 2	28	38	20	34	28
Day 3	34	36	20	26	30
Day 4	58	52	8	38	34
Day 5	94	46	14	20	26
Total	256	210	72	152	150

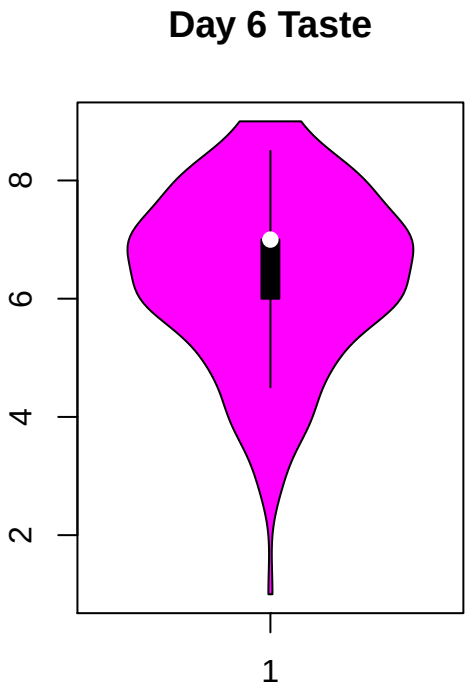
Table 8: Brand of Oil

	Mel Fry	Clear Valley
Day 1	78	78
Day 2	74	74
Day 3	73	73
Day 4	95	95
Day 5	100	100
Total	420	420

SECOND WEEK

Table 9: Linear Model for Day 6

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	0.3268386	0.4612258	0.7086304	0.4794655
Samp.Set	-0.0009999	0.0016843	-0.5936476	0.5534890
Samp.2	0.0424831	0.0843955	0.5033804	0.6153089
Samp.Pos	0.0341415	0.0860330	0.3968426	0.6919511
Gender2	-0.1548506	0.0928989	-1.6668716	0.0972694
Age2	-0.1249012	0.1085815	-1.1502992	0.2515382
Age3	-0.0770764	0.1807658	-0.4263881	0.6703317
Age4	-0.0969106	0.1587182	-0.6105828	0.5422417
Age5	-0.3046050	0.1831958	-1.6627288	0.0980974
Temperature	-0.0124201	0.0624153	-0.1989915	0.8424927
Appearance	0.2298033	0.0403166	5.6999628	0.0000000
Color	-0.0740886	0.0594281	-1.2466932	0.2141210
Taste	0.5009284	0.0490352	10.2156827	0.0000000
Texture	0.3232100	0.0464749	6.9545022	0.0000000
Preference	-0.0421814	0.0652287	-0.6466690	0.5186653



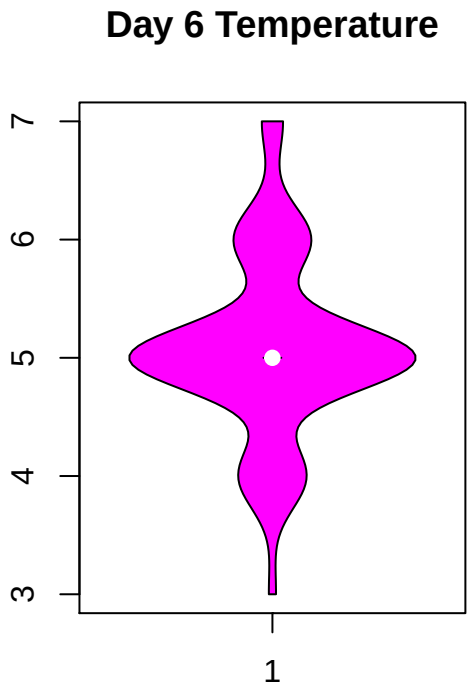
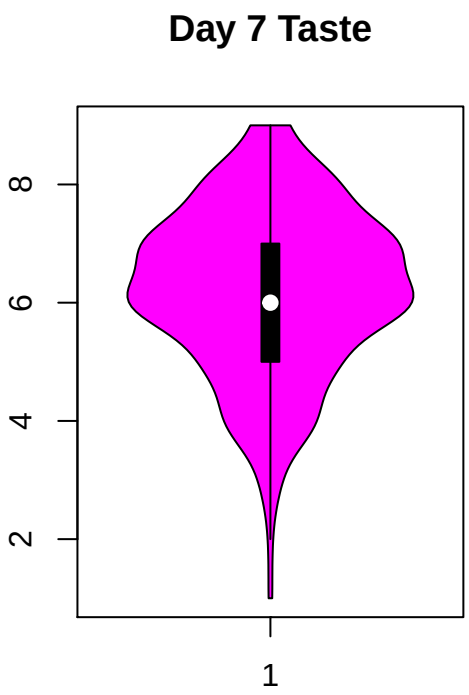


Table 10: Linear Model for Day 7

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	0.6268684	0.3808755	1.6458616	0.1011405
Samp.Set	0.0003031	0.0010871	0.2788477	0.7806090
Samp.2	0.0285738	0.0736487	0.3879738	0.6983897
Samp.Pos	0.0014419	0.0733790	0.0196494	0.9843399
Gender2	0.0656365	0.0775179	0.8467268	0.3980162
Age2	-0.1187108	0.0952723	-1.2460164	0.2140098
Age3	0.0174916	0.1990736	0.0878651	0.9300593
Age4	0.0130284	0.1140623	0.1142221	0.9091601
Age5	-0.0177894	0.1262159	-0.1409443	0.8880357
Temperature	-0.0773285	0.0462131	-1.6733030	0.0956097
Appearance	0.1233401	0.0393395	3.1352760	0.0019376
Color	-0.0090787	0.0537307	-0.1689666	0.8659695
Taste	0.5220550	0.0403018	12.9536380	0.0000000
Texture	0.3315965	0.0374922	8.8444137	0.0000000
Preference	-0.0236861	0.0559675	-0.4232116	0.6725313



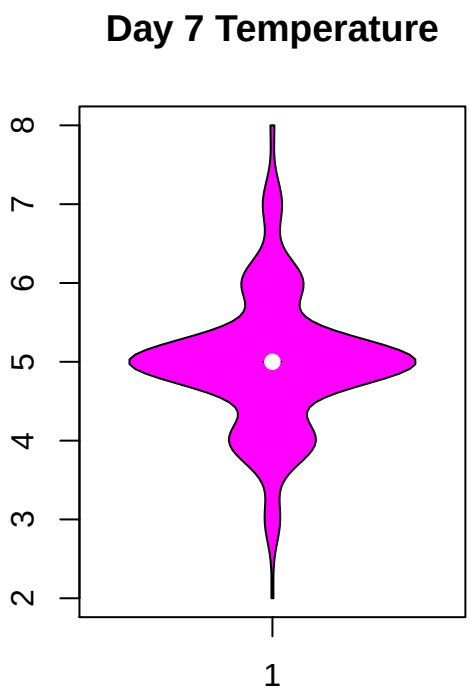
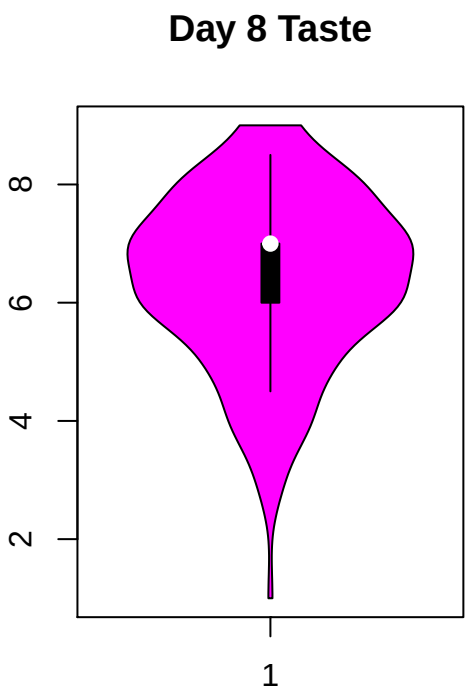


Table 11: Linear Model for Day 8

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	0.3268386	0.4612258	0.7086304	0.4794655
Samp.Set	-0.0009999	0.0016843	-0.5936476	0.5534890
Samp.2	0.0424831	0.0843955	0.5033804	0.6153089
Samp.Pos	0.0341415	0.0860330	0.3968426	0.6919511
Gender2	-0.1548506	0.0928989	-1.6668716	0.0972694
Age2	-0.1249012	0.1085815	-1.1502992	0.2515382
Age3	-0.0770764	0.1807658	-0.4263881	0.6703317
Age4	-0.0969106	0.1587182	-0.6105828	0.5422417
Age5	-0.3046050	0.1831958	-1.6627288	0.0980974
Temperature	-0.0124201	0.0624153	-0.1989915	0.8424927
Appearance	0.2298033	0.0403166	5.6999628	0.0000000
Color	-0.0740886	0.0594281	-1.2466932	0.2141210
Taste	0.5009284	0.0490352	10.2156827	0.0000000
Texture	0.3232100	0.0464749	6.9545022	0.0000000
Preference	-0.0421814	0.0652287	-0.6466690	0.5186653



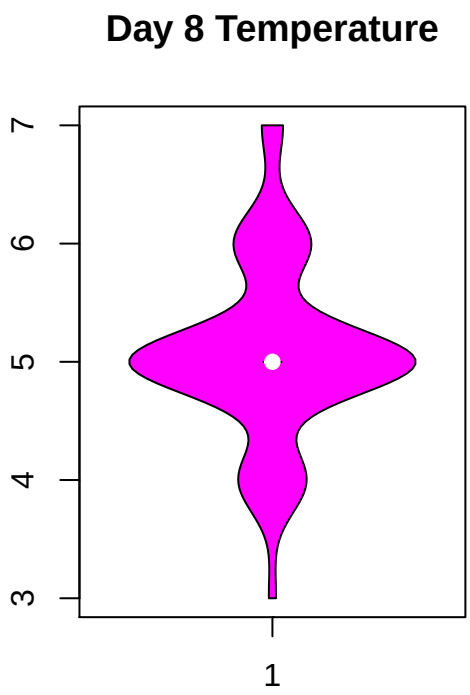
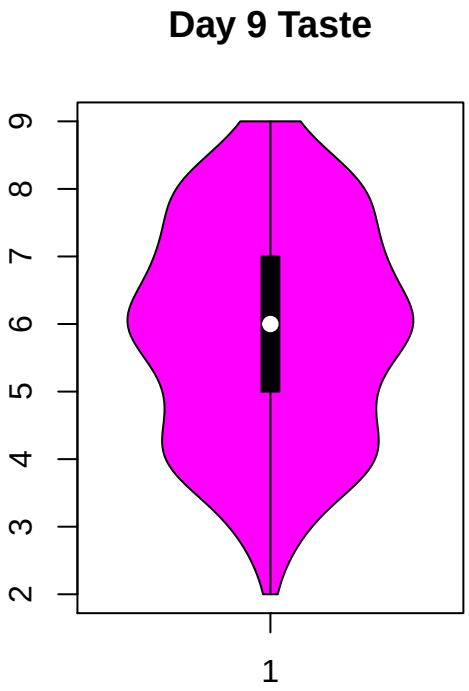


Table 12: Linear Model for Day 9

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	0.0001607	0.4022220	0.0003996	0.9996816
Samp.Set	-0.0009614	0.0016684	-0.5762597	0.5651252
Samp.2	-0.0360373	0.0831002	-0.4336608	0.6650293
Samp.Pos	-0.1503328	0.0819576	-1.8342760	0.0681854
Gender2	0.0952691	0.0853923	1.1156634	0.2659827
Age2	0.1199731	0.1194415	1.0044509	0.3164456
Age3	-0.1018683	0.1597559	-0.6376496	0.5244735
Age4	-0.0891057	0.1297570	-0.6867119	0.4931060
Age5	0.0586777	0.1604246	0.3657651	0.7149494
Temperature	0.0626275	0.0544757	1.1496417	0.2517442
Appearance	0.2064689	0.0395682	5.2180458	0.0000005
Color	-0.0405612	0.0552586	-0.7340249	0.4638432
Taste	0.5357770	0.0424030	12.6353520	0.0000000
Texture	0.2874178	0.0399736	7.1901948	0.0000000
Preference	-0.0200567	0.0570315	-0.3516769	0.7254723



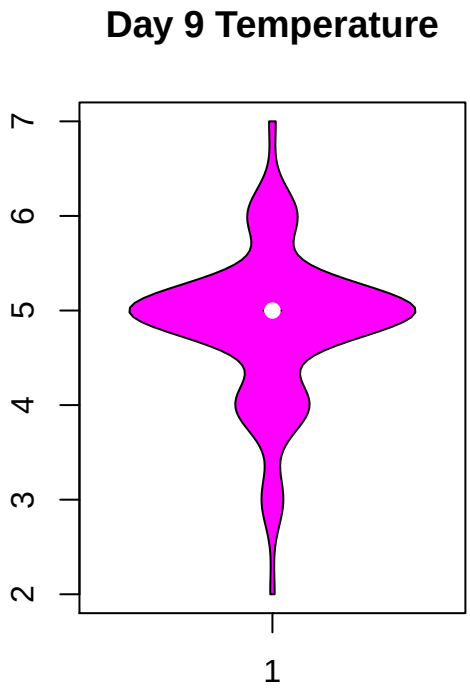
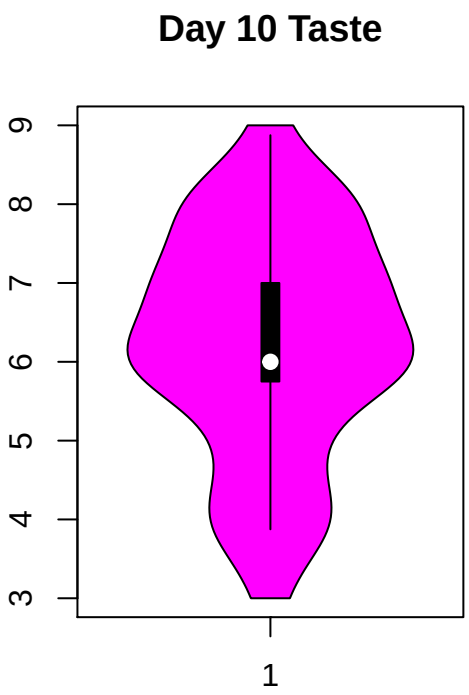


Table 13: Linear Model for Day 10

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	-1.0165830	0.4251687	-2.3910110	0.0179011
Samp.Set	0.0028971	0.0019781	1.4645587	0.1448991
Samp.2	-0.0477543	0.0893953	-0.5341929	0.5939101
Samp.Pos	0.0061157	0.0909869	0.0672150	0.9464900
Gender2	-0.0251542	0.0971506	-0.2589195	0.7960124
Age2	0.2116309	0.1331760	1.5891067	0.1139053
Age3	-0.0321331	0.1801336	-0.1783851	0.8586342
Age4	0.0549231	0.1474291	0.3725393	0.7099582
Age5	0.0046428	0.1710834	0.0271377	0.9783819
Temperature	0.0773822	0.0512438	1.5100792	0.1328906
Appearance	0.1133879	0.0428845	2.6440321	0.0089639
Color	0.0615071	0.0642709	0.9569983	0.3399351
Taste	0.5678930	0.0467191	12.1554855	0.0000000
Texture	0.3445182	0.0433047	7.9556807	0.0000000
Preference	-0.0402986	0.0621542	-0.6483656	0.5176285



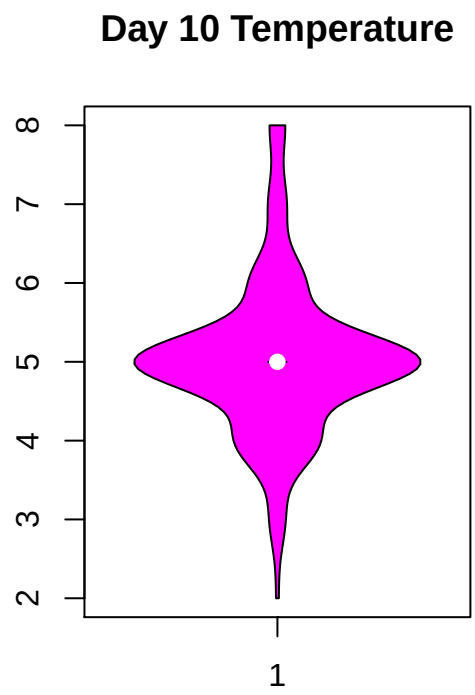


Table 14: Gender 2nd Week

	Male	Female
Day 6	104	92
Day 7	136	112
Day 8	104	92
Day 9	98	106
Day 10	86	98
Total	528	500

Table 15: Age of Oil 2nd Week

	Age 1	Age 2	Age 3	Age 4	Age 5
Day 6	94	54	14	20	14
Day 7	100	68	10	38	32
Day 8	94	54	14	20	14
Day 9	80	54	18	34	18
Day 10	70	54	16	26	18
Total	438	284	72	138	96

Table 16: Brand of Oil

	Mel Fry	Clear Valley
Day 6	98	98
Day 7	124	124
Day 8	98	98
Day 9	102	102
Day 10	92	92
Total	514	514

```
histosforall(1)
#\includegraphics[width=450pt]{Day1.jpg}
```

```
histosforall(2)
#\includegraphics[width=450pt]{Day2.jpg}
```

```
histosforall(3)
#\includegraphics[width=450pt]{Day3.jpg}
```

```
histosforall(4)
#\includegraphics[width=450pt]{Day4.jpg}
```

```
histosforall(5)
#\includegraphics[width=450pt]{Day5.jpg}
```

```
histosforall(1)
#\includegraphics[width=450pt]{Day1.jpg}
```

```
histosforall(2)
#\includegraphics[width=450pt]{Day2.jpg}
```

```
histosforall(3)
#\includegraphics[width=450pt]{Day3.jpg}
```

```
histosforall(4)
#\includegraphics[width=450pt]{Day4.jpg}
```

```
histosforall(5)
#\includegraphics[width=450pt]{Day5.jpg}
```

```
#### Only done for Day 1
# paste cells into one string, use ";" as separator
comments.string <- paste(Day1$Comments , collapse = " " )
# split string at ";"
comments.vector <- strsplit(comments.string , " " )[[1]]
# get rid of white space to prevent errors
comments.vector.clean <- gsub ( " " , "" , comments.vector )
# tabulate data
sort(table(comments.vector.clean),decreasing = TRUE)
```