

SAS Program for smoke type groups on avg glucose level CRD

Obs	X1	X3
1	formerly	253.93
2	formerly	112.95
3	formerly	86.91
4	formerly	223.35
5	formerly	63.16
6	formerly	71.79
7	formerly	72.94
8	formerly	93.71
9	formerly	244.28
10	formerly	167.59
11	formerly	88.65
12	formerly	112.33
13	formerly	103.55
14	formerly	110.36
15	formerly	97.86
16	formerly	55.57
17	formerly	57.02
18	formerly	88.66
19	formerly	91.65
20	formerly	219.80
21	formerly	57.17
22	formerly	208.39
23	formerly	60.34
24	formerly	85.64
25	formerly	58.29
26	formerly	217.94
27	formerly	157.67
28	formerly	72.08
29	formerly	88.81
30	formerly	79.92
31	formerly	78.92
32	formerly	227.89

33	formerly	105.72
34	formerly	72.20
35	formerly	103.43
36	formerly	239.64
37	formerly	61.94
38	formerly	95.07
39	formerly	85.62
40	formerly	95.16
41	formerly	121.17
42	formerly	103.44
43	formerly	80.88
44	formerly	118.82
45	formerly	96.75
46	formerly	112.98
47	formerly	80.01
48	formerly	59.74
49	formerly	160.87
50	formerly	83.60
51	formerly	107.33
52	formerly	62.57
53	formerly	143.47
54	formerly	62.99
55	formerly	73.56
56	formerly	83.84
57	formerly	98.44
58	formerly	219.50
59	formerly	200.73
60	formerly	72.49
61	formerly	74.23
62	formerly	87.24
63	formerly	93.93
64	formerly	94.24
65	formerly	89.95
66	formerly	75.53
67	formerly	73.36

	formerly	235.06
69	formerly	108.56
70	formerly	75.28
71	formerly	200.59
72	formerly	99.76
73	formerly	106.97
74	formerly	58.24
75	formerly	77.53
76	formerly	78.93
77	formerly	85.03
78	formerly	96.25
79	formerly	99.44
80	formerly	84.46
81	formerly	208.20
82	formerly	215.94
83	formerly	65.70
84	formerly	217.66
85	formerly	111.99
86	formerly	101.19
87	formerly	203.44
88	formerly	81.00
89	formerly	255.17
90	formerly	58.23
91	formerly	215.33
92	formerly	100.12
93	formerly	216.19
94	formerly	99.64
95	formerly	76.12
96	formerly	205.01
97	formerly	110.60
98	formerly	94.76
99	formerly	182.22
100	formerly	118.22
101	never_sm	155.23
102	never_sm	66.13

	never_sm	79.53
104	never_sm	59.62
105	never_sm	166.38
106	never_sm	65.66
107	never_sm	231.15
108	never_sm	73.02
109	never_sm	187.52
110	never_sm	77.67
111	never_sm	62.41
112	never_sm	60.36
113	never_sm	111.73
114	never_sm	197.54
115	never_sm	223.14
116	never_sm	81.10
117	never_sm	82.37
118	never_sm	64.99
119	never_sm	84.10
120	never_sm	99.65
121	never_sm	80.28
122	never_sm	192.50
123	never_sm	101.35
124	never_sm	124.37
125	never_sm	194.04
126	never_sm	73.71
127	never_sm	112.62
128	never_sm	99.94
129	never_sm	192.47
130	never_sm	74.72
131	never_sm	100.93
132	never_sm	87.33
133	never_sm	111.85
134	never_sm	124.45
135	never_sm	153.38
136	never_sm	76.82
137	never_sm	146.08

	never_sm	89.61
139	never_sm	90.11
140	never_sm	72.13
141	never_sm	78.24
142	never_sm	83.78
143	never_sm	84.66
144	never_sm	204.92
145	never_sm	244.30
146	never_sm	88.88
147	never_sm	107.50
148	never_sm	115.07
149	never_sm	176.78
150	never_sm	85.59
151	never_sm	76.98
152	never_sm	64.40
153	never_sm	206.33
154	never_sm	74.80
155	never_sm	183.87
156	never_sm	216.07
157	never_sm	100.97
158	never_sm	90.55
159	never_sm	82.81
160	never_sm	115.99
161	never_sm	65.93
162	never_sm	64.17
163	never_sm	104.86
164	never_sm	123.04
165	never_sm	133.58
166	never_sm	85.17
167	never_sm	69.11
168	never_sm	86.39
169	never_sm	120.06
170	never_sm	105.52
171	never_sm	237.74
172	never_sm	79.98

	never_sm	73.04
174	never_sm	88.00
175	never_sm	68.68
176	never_sm	131.41
177	never_sm	129.43
178	never_sm	67.07
179	never_sm	107.42
180	never_sm	74.29
181	never_sm	93.93
182	never_sm	117.69
183	never_sm	59.43
184	never_sm	69.17
185	never_sm	115.93
186	never_sm	113.85
187	never_sm	211.12
188	never_sm	266.59
189	never_sm	56.63
190	never_sm	92.59
191	never_sm	158.33
192	never_sm	92.13
193	never_sm	70.28
194	never_sm	96.18
195	never_sm	98.91
196	never_sm	87.49
197	never_sm	83.88
198	never_sm	105.77
199	never_sm	197.11
200	never_sm	91.61
201	smokes	86.36
202	smokes	116.62
203	smokes	87.25
204	smokes	96.29
205	smokes	56.89
206	smokes	104.00
207	smokes	214.43

	smokes	218.54
209	smokes	83.76
210	smokes	95.19
211	smokes	84.47
212	smokes	79.92
213	smokes	118.82
214	smokes	200.49
215	smokes	113.40
216	smokes	91.93
217	smokes	106.01
218	smokes	72.79
219	smokes	66.01
220	smokes	90.30
221	smokes	111.79
222	smokes	89.18
223	smokes	83.61
224	smokes	82.47
225	smokes	104.55
226	smokes	74.81
227	smokes	93.23
228	smokes	83.10
229	smokes	97.60
230	smokes	87.26
231	smokes	100.20
232	smokes	110.55
233	smokes	121.66
234	smokes	82.72
235	smokes	82.44
236	smokes	102.40
237	smokes	75.56
238	smokes	82.46
239	smokes	87.85
240	smokes	56.37
241	smokes	120.46
242	smokes	79.79

	smokes	67.50
244	smokes	84.43
245	smokes	198.36
246	smokes	79.73
247	smokes	111.61
248	smokes	114.32
249	smokes	56.12
250	smokes	103.15
251	smokes	65.12
252	smokes	90.31
253	smokes	82.09
254	smokes	55.47
255	smokes	80.88
256	smokes	229.86
257	smokes	82.02
258	smokes	216.00
259	smokes	133.24
260	smokes	111.10
261	smokes	73.54
262	smokes	154.03
263	smokes	101.81
264	smokes	103.08
265	smokes	83.01
266	smokes	87.62
267	smokes	95.75
268	smokes	226.93
269	smokes	101.76
270	smokes	71.71
271	smokes	64.40
272	smokes	160.76
273	smokes	73.75
274	smokes	85.53
275	smokes	74.11
276	smokes	69.88
277	smokes	219.39

	smokes	69.23
279	smokes	92.32
280	smokes	99.69
281	smokes	88.20
282	smokes	72.53
283	smokes	80.86
284	smokes	100.31
285	smokes	162.24
286	smokes	113.05
287	smokes	73.07
288	smokes	101.81
289	smokes	77.99
290	smokes	81.38
291	smokes	101.41
292	smokes	81.60
293	smokes	193.94
294	smokes	124.64
295	smokes	56.96
296	smokes	57.33
297	smokes	70.53
298	smokes	73.48
299	smokes	72.96
300	smokes	87.10
301	formerly	63.41
302	formerly	76.46
303	formerly	94.65
304	formerly	78.29
305	formerly	85.04
306	formerly	77.55
307	formerly	65.42
308	formerly	237.75
309	formerly	60.22
310	formerly	92.99
311	formerly	75.77
312	formerly	222.52

	formerly	58.69
314	formerly	115.52
315	formerly	89.18
316	formerly	67.29
317	formerly	106.08
318	formerly	93.72
319	formerly	111.37
320	formerly	97.89
321	formerly	97.47
322	formerly	204.98
323	formerly	62.46
324	formerly	62.62
325	formerly	216.70
326	formerly	221.06
327	formerly	68.76
328	formerly	102.87
329	formerly	96.84
330	formerly	106.53
331	formerly	77.99
332	formerly	97.58
333	formerly	234.35
334	formerly	75.13
335	formerly	223.83
336	formerly	106.52
337	formerly	101.95
338	formerly	85.29
339	formerly	185.17
340	formerly	109.65
341	formerly	83.07
342	formerly	111.65
343	formerly	238.78
344	formerly	70.16
345	formerly	83.97
346	formerly	58.42
347	formerly	84.48

	formerly	197.28
349	formerly	109.59
350	formerly	87.81
351	formerly	72.02
352	formerly	86.94
353	formerly	65.01
354	formerly	82.06
355	formerly	95.38
356	formerly	110.85
357	formerly	106.83
358	formerly	74.63
359	formerly	66.46
360	formerly	60.20
361	formerly	120.94
362	formerly	209.50
363	formerly	116.66
364	formerly	79.34
365	formerly	117.63
366	formerly	63.32
367	formerly	101.46
368	formerly	105.28
369	formerly	69.26
370	formerly	74.12
371	formerly	65.66
372	formerly	81.99
373	formerly	61.80
374	formerly	89.21
375	formerly	84.09
376	formerly	82.71
377	formerly	57.82
378	formerly	186.21
379	formerly	226.11
380	formerly	81.96
381	formerly	83.30
382	formerly	114.50

	formerly	83.89
384	formerly	116.20
385	formerly	170.22
386	formerly	125.11
387	formerly	56.48
388	formerly	57.89
389	formerly	74.70
390	formerly	216.64
391	formerly	80.81
392	formerly	94.34
393	formerly	83.93
394	formerly	74.14
395	formerly	56.11
396	formerly	209.26
397	formerly	88.41
398	formerly	229.20
399	formerly	220.36
400	formerly	63.71
401	never_sm	86.97
402	never_sm	195.25
403	never_sm	79.91
404	never_sm	92.86
405	never_sm	102.13
406	never_sm	79.33
407	never_sm	109.22
408	never_sm	122.46
409	never_sm	75.87
410	never_sm	123.10
411	never_sm	131.43
412	never_sm	216.71
413	never_sm	117.77
414	never_sm	81.78
415	never_sm	85.46
416	never_sm	82.89
417	never_sm	199.18

	never_sm	75.77
419	never_sm	123.94
420	never_sm	116.23
421	never_sm	141.37
422	never_sm	112.96
423	never_sm	71.08
424	never_sm	145.23
425	never_sm	75.95
426	never_sm	83.51
427	never_sm	267.60
428	never_sm	76.19
429	never_sm	89.22
430	never_sm	105.51
431	never_sm	62.48
432	never_sm	91.46
433	never_sm	65.69
434	never_sm	145.25
435	never_sm	83.85
436	never_sm	61.11
437	never_sm	231.76
438	never_sm	99.48
439	never_sm	226.98
440	never_sm	172.86
441	never_sm	65.42
442	never_sm	110.38
443	never_sm	80.40
444	never_sm	69.24
445	never_sm	80.00
446	never_sm	209.50
447	never_sm	100.80
448	never_sm	79.58
449	never_sm	94.19
450	never_sm	70.61
451	never_sm	109.46
452	never_sm	77.95

	never_sm	95.52
454	never_sm	90.51
455	never_sm	133.82
456	never_sm	82.18
457	never_sm	71.30
458	never_sm	185.27
459	never_sm	67.92
460	never_sm	80.97
461	never_sm	91.01
462	never_sm	81.68
463	never_sm	249.31
464	never_sm	87.40
465	never_sm	86.06
466	never_sm	70.11
467	never_sm	69.40
468	never_sm	74.91
469	never_sm	75.04
470	never_sm	98.05
471	never_sm	80.08
472	never_sm	96.02
473	never_sm	119.52
474	never_sm	85.84
475	never_sm	89.33
476	never_sm	76.93
477	never_sm	99.92
478	never_sm	78.18
479	never_sm	204.63
480	never_sm	122.25
481	never_sm	106.56
482	never_sm	56.42
483	never_sm	90.60
484	never_sm	119.13
485	never_sm	93.05
486	never_sm	89.68
487	never_sm	111.48

	never_sm	68.72
489	never_sm	66.30
490	never_sm	78.29
491	never_sm	98.02
492	never_sm	84.31
493	never_sm	93.90
494	never_sm	82.64
495	never_sm	107.82
496	never_sm	93.80
497	never_sm	65.16
498	never_sm	64.45
499	never_sm	107.46
500	never_sm	96.98
501	smokes	77.75
502	smokes	67.78
503	smokes	129.54
504	smokes	78.49
505	smokes	57.76
506	smokes	76.68
507	smokes	103.45
508	smokes	240.59
509	smokes	87.88
510	smokes	142.64
511	smokes	83.16
512	smokes	82.53
513	smokes	66.55
514	smokes	193.22
515	smokes	202.05
516	smokes	200.66
517	smokes	127.21
518	smokes	93.60
519	smokes	250.89
520	smokes	73.78
521	smokes	84.40
522	smokes	101.12

	smokes	87.72
524	smokes	90.95
525	smokes	95.66
526	smokes	123.65
527	smokes	173.14
528	smokes	86.55
529	smokes	100.88
530	smokes	83.10
531	smokes	72.33
532	smokes	135.75
533	smokes	133.76
534	smokes	222.21
535	smokes	59.31
536	smokes	77.77
537	smokes	61.32
538	smokes	122.48
539	smokes	77.93
540	smokes	92.75
541	smokes	242.84
542	smokes	96.30
543	smokes	89.98
544	smokes	90.73
545	smokes	221.29
546	smokes	65.41
547	smokes	70.73
548	smokes	225.35
549	smokes	100.54
550	smokes	90.61
551	smokes	70.56
552	smokes	93.96
553	smokes	254.95
554	smokes	97.73
555	smokes	217.55
556	smokes	64.41
557	smokes	131.19

	smokes	107.06
559	smokes	87.12
560	smokes	85.18
561	smokes	63.82
562	smokes	59.26
563	smokes	242.30
564	smokes	80.35
565	smokes	93.51
566	smokes	206.66
567	smokes	75.50
568	smokes	78.29
569	smokes	122.41
570	smokes	110.47
571	smokes	94.96
572	smokes	145.18
573	smokes	58.09
574	smokes	105.63
575	smokes	206.52
576	smokes	97.95
577	smokes	191.48
578	smokes	81.25
579	smokes	91.23
580	smokes	61.45
581	smokes	100.42
582	smokes	81.76
583	smokes	82.61
584	smokes	139.90
585	smokes	118.85
586	smokes	102.16
587	smokes	108.82
588	smokes	95.57
589	smokes	144.16
590	smokes	60.06
591	smokes	89.68
592	smokes	60.77

	smokes	102.07
594	smokes	57.51
595	smokes	114.33
596	smokes	112.77
597	smokes	60.69
598	smokes	79.83
599	smokes	86.99
600	smokes	116.85
601	formerly	194.37
602	formerly	89.45
603	formerly	86.05
604	formerly	252.72
605	formerly	56.31
606	formerly	84.79
607	formerly	68.84
608	formerly	236.79
609	formerly	207.64
610	formerly	71.15
611	formerly	207.96
612	formerly	59.68
613	formerly	94.45
614	formerly	103.37
615	formerly	70.29
616	formerly	209.15
617	formerly	105.76
618	formerly	101.22
619	formerly	79.30
620	formerly	87.41
621	formerly	87.15
622	formerly	214.51
623	formerly	81.15
624	formerly	228.92
625	formerly	111.81
626	formerly	169.43
627	formerly	70.73

	formerly	261.67
629	formerly	87.16
630	formerly	89.73
631	formerly	208.31
632	formerly	102.73
633	formerly	96.04
634	formerly	79.69
635	formerly	104.07
636	formerly	56.11
637	formerly	99.15
638	formerly	112.64
639	formerly	202.21
640	formerly	111.98
641	formerly	188.13
642	formerly	114.01
643	formerly	81.54
644	formerly	83.12
645	formerly	78.70
646	formerly	180.63
647	formerly	119.30
648	formerly	115.91
649	formerly	77.46
650	formerly	107.47
651	formerly	91.85
652	formerly	75.46
653	formerly	90.90
654	formerly	227.23
655	formerly	69.15
656	formerly	143.15
657	formerly	223.68
658	formerly	196.08
659	formerly	79.14
660	formerly	95.36
661	formerly	197.58
662	formerly	179.67

	formerly	200.28
664	formerly	195.71
665	formerly	80.18
666	formerly	103.17
667	formerly	155.32
668	formerly	189.82
669	formerly	111.33
670	formerly	226.88
671	formerly	227.81
672	formerly	103.21
673	formerly	106.41
674	formerly	98.14
675	formerly	75.93
676	formerly	70.22
677	formerly	77.44
678	formerly	160.00
679	formerly	60.67
680	formerly	202.51
681	formerly	69.28
682	formerly	85.82
683	formerly	134.39
684	formerly	137.74
685	formerly	230.74
686	formerly	199.84
687	formerly	65.46
688	formerly	93.13
689	formerly	231.19
690	formerly	88.62
691	formerly	80.42
692	formerly	124.34
693	formerly	91.02
694	formerly	116.78
695	formerly	195.03
696	formerly	64.66
697	formerly	97.68

	formerly	87.50
699	formerly	162.14
700	formerly	70.87
701	never_sm	88.68
702	never_sm	82.81
703	never_sm	85.82
704	never_sm	94.64
705	never_sm	75.19
706	never_sm	127.57
707	never_sm	180.80
708	never_sm	106.68
709	never_sm	66.71
710	never_sm	112.37
711	never_sm	207.62
712	never_sm	85.29
713	never_sm	106.84
714	never_sm	151.30
715	never_sm	81.95
716	never_sm	192.16
717	never_sm	110.41
718	never_sm	82.35
719	never_sm	84.85
720	never_sm	204.77
721	never_sm	65.29
722	never_sm	71.66
723	never_sm	74.36
724	never_sm	90.43
725	never_sm	210.23
726	never_sm	78.14
727	never_sm	190.92
728	never_sm	103.60
729	never_sm	60.73
730	never_sm	211.58
731	never_sm	205.84
732	never_sm	57.42

	never_sm	94.89
734	never_sm	59.20
735	never_sm	93.60
736	never_sm	70.23
737	never_sm	156.45
738	never_sm	79.77
739	never_sm	111.36
740	never_sm	115.03
741	never_sm	192.37
742	never_sm	228.20
743	never_sm	174.12
744	never_sm	142.12
745	never_sm	74.32
746	never_sm	68.40
747	never_sm	193.61
748	never_sm	69.12
749	never_sm	70.94
750	never_sm	194.99
751	never_sm	72.49
752	never_sm	90.44
753	never_sm	62.67
754	never_sm	82.33
755	never_sm	71.08
756	never_sm	212.19
757	never_sm	124.16
758	never_sm	108.64
759	never_sm	72.55
760	never_sm	60.94
761	never_sm	56.07
762	never_sm	103.29
763	never_sm	163.82
764	never_sm	223.26
765	never_sm	65.30
766	never_sm	56.75
767	never_sm	96.82

	never_sm	95.08
769	never_sm	202.06
770	never_sm	69.88
771	never_sm	169.74
772	never_sm	238.53
773	never_sm	82.99
774	never_sm	76.57
775	never_sm	66.16
776	never_sm	77.12
777	never_sm	68.53
778	never_sm	110.78
779	never_sm	224.63
780	never_sm	100.96
781	never_sm	124.13
782	never_sm	57.28
783	never_sm	124.78
784	never_sm	77.29
785	never_sm	215.81
786	never_sm	98.09
787	never_sm	213.92
788	never_sm	209.58
789	never_sm	217.30
790	never_sm	74.96
791	never_sm	83.70
792	never_sm	161.95
793	never_sm	191.33
794	never_sm	69.61
795	never_sm	109.47
796	never_sm	167.41
797	never_sm	67.03
798	never_sm	80.63
799	never_sm	251.60
800	never_sm	88.97
801	smokes	132.08
802	smokes	126.39

	smokes	207.32
804	smokes	216.88
805	smokes	114.45
806	smokes	73.41
807	smokes	110.33
808	smokes	93.17
809	smokes	139.87
810	smokes	86.40
811	smokes	72.09
812	smokes	67.84
813	smokes	84.31
814	smokes	160.64
815	smokes	209.90
816	smokes	106.10
817	smokes	68.44
818	smokes	128.04
819	smokes	135.19
820	smokes	67.06
821	smokes	251.46
822	smokes	83.64
823	smokes	229.92
824	smokes	82.85
825	smokes	94.71
826	smokes	103.69
827	smokes	95.01
828	smokes	84.43
829	smokes	97.99
830	smokes	85.92
831	smokes	99.83
832	smokes	93.58
833	smokes	76.11
834	smokes	65.71
835	smokes	70.43
836	smokes	62.93
837	smokes	201.45

	smokes	239.95
839	smokes	114.54
840	smokes	90.38
841	smokes	142.31
842	smokes	55.32
843	smokes	76.09
844	smokes	123.08
845	smokes	60.77
846	smokes	195.23
847	smokes	101.57
848	smokes	68.37
849	smokes	248.24
850	smokes	92.90
851	smokes	69.76
852	smokes	65.84
853	smokes	240.69
854	smokes	85.51
855	smokes	73.72
856	smokes	82.62
857	smokes	109.09
858	smokes	231.43
859	smokes	90.06
860	smokes	67.97
861	smokes	199.86
862	smokes	98.39
863	smokes	142.63
864	smokes	80.92
865	smokes	111.15
866	smokes	77.82
867	smokes	93.20
868	smokes	97.53
869	smokes	113.74
870	smokes	111.38
871	smokes	104.23
872	smokes	61.94

	smokes	83.88
874	smokes	105.59
875	smokes	95.44
876	smokes	100.49
877	smokes	75.25
878	smokes	249.29
879	smokes	94.75
880	smokes	267.61
881	smokes	232.89
882	smokes	83.07
883	smokes	74.33
884	smokes	105.88
885	smokes	90.43
886	smokes	95.49
887	smokes	191.82
888	smokes	136.81
889	smokes	73.57
890	smokes	106.43
891	smokes	61.10
892	smokes	69.18
893	smokes	243.73
894	smokes	57.83
895	smokes	101.85
896	smokes	114.47
897	smokes	118.03
898	smokes	63.72
899	smokes	248.37
900	smokes	88.83

SAS Program for smoke type groups on avg glucose level CRD

The UNIVARIATE Procedure
Variable: X3 (X3 - avg_glucose_level)

X1 - smoker_type=formerly

Moments			
N	300	Sum Weights	300
Mean	117.663	Sum Observations	35298.9
Std Deviation	56.466763	Variance	3188.49533
Skewness	1.04959747	Kurtosis	-0.3292387
Uncorrected SS	5106734.57	Corrected SS	953360.103
Coeff Variation	47.9902459	Std Error Mean	3.26011008

Basic Statistical Measures			
Location		Variability	
Mean	117.6630	Std Deviation	56.46676
Median	95.3700	Variance	3188
Mode	56.1100	Range	206.10000
		Interquartile Range	65.17000

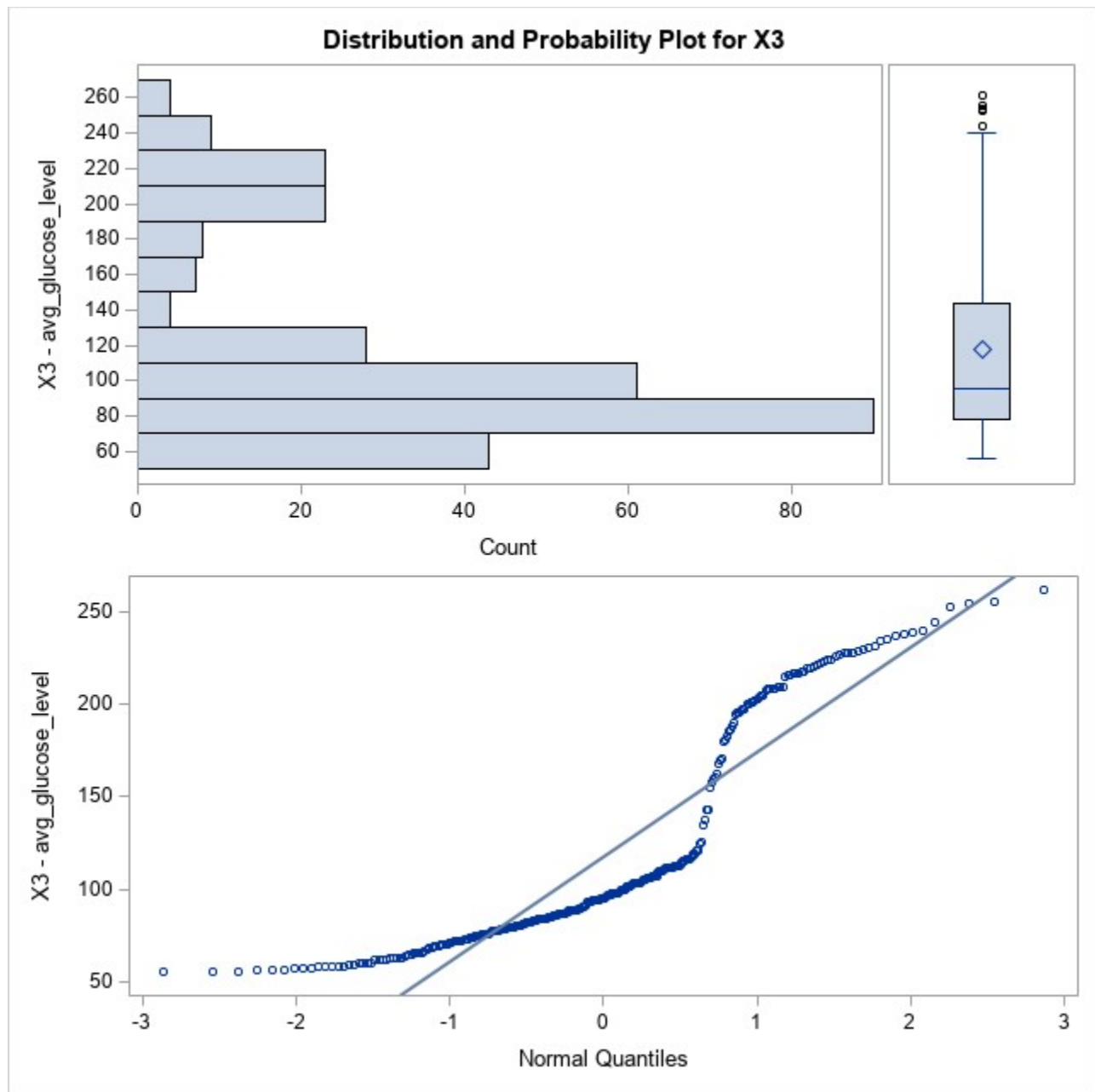
Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	36.09173	Pr > t 	<.0001
Sign	M	150	Pr >= M 	<.0001
Signed Rank	S	22575	Pr >= S 	<.0001

Tests for Normality				
Test	Statistic		p Value	
Shapiro-Wilk	W	0.820637	Pr < W	<0.0001
Kolmogorov-Smirnov	D	0.223048	Pr > D	<0.0100
Cramer-von Mises	W-Sq	4.125526	Pr > W-Sq	<0.0050
Anderson-Darling	A-Sq	22.46921	Pr > A-Sq	<0.0050

Quantiles (Definition 5)	
Level	Quantile
100% Max	261.670

99%	253.325
95%	228.405
90%	217.180
75% Q3	143.310
50% Median	95.370
25% Q1	78.140
10%	64.185
5%	59.710
1%	56.210
0% Min	55.570

Extreme Observations					
Lowest			Highest		
Value	X1	Obs	Value	X1	Obs
55.57	formerly	16	244.28	formerly	9
56.11	formerly	236	252.72	formerly	204
56.11	formerly	195	253.93	formerly	1
56.31	formerly	205	255.17	formerly	89
56.48	formerly	187	261.67	formerly	228



SAS Program for smoke type groups on avg glucose level CRD

The UNIVARIATE Procedure
Variable: X3 (X3 - avg_glucose_level)

X1 - smoker_type=never_sm

Moments			
N	300	Sum Weights	300
Mean	112.352167	Sum Observations	33705.65
Std Deviation	50.7311264	Variance	2573.64719
Skewness	1.246435	Kurtosis	0.43802486
Uncorrected SS	4556423.32	Corrected SS	769520.51
Coeff Variation	45.1536699	Std Error Mean	2.92896295

Basic Statistical Measures			
Location		Variability	
Mean	112.3522	Std Deviation	50.73113
Median	92.7250	Variance	2574
Mode	71.0800	Range	211.53000
		Interquartile Range	47.53500

Note: The mode displayed is the smallest of 2 modes with a count of 2.

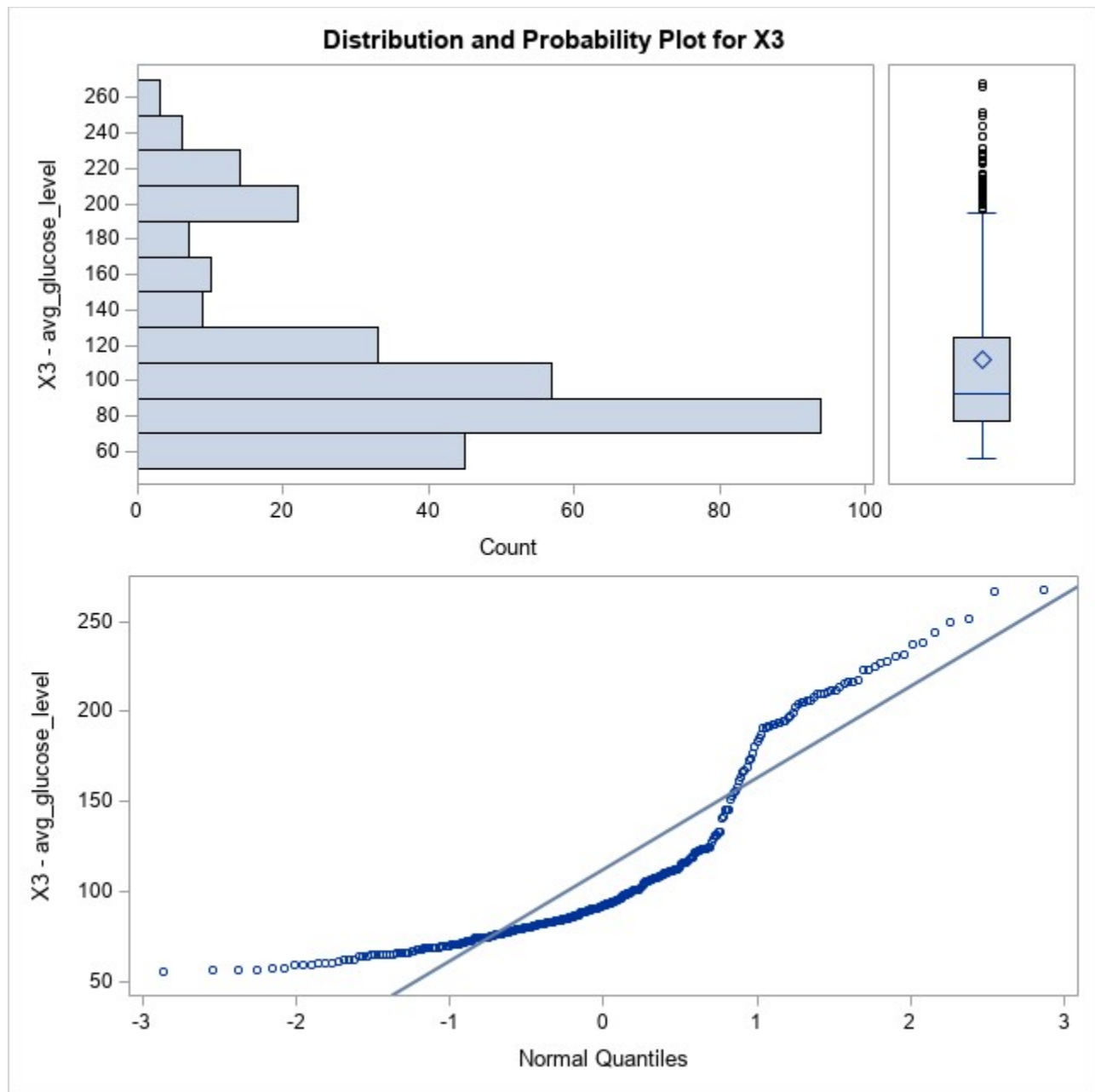
Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	38.35903	Pr > t 	<.0001
Sign	M	150	Pr >= M 	<.0001
Signed Rank	S	22575	Pr >= S 	<.0001

Tests for Normality				
Test	Statistic		p Value	
Shapiro-Wilk	W	0.828875	Pr < W	<0.0001
Kolmogorov-Smirnov	D	0.181887	Pr > D	<0.0100
Cramer-von Mises	W-Sq	3.553186	Pr > W-Sq	<0.0050
Anderson-Darling	A-Sq	19.83201	Pr > A-Sq	<0.0050

Quantiles (Definition 5)

Level	Quantile
100% Max	267.600
99%	250.455
95%	217.005
90%	204.700
75% Q3	124.410
50% Median	92.725
25% Q1	76.875
10%	66.505
5%	62.575
1%	56.690
0% Min	56.070

Extreme Observations					
Lowest			Highest		
Value	X1	Obs	Value	X1	Obs
56.07	never_sm	561	244.30	never_sm	345
56.42	never_sm	482	249.31	never_sm	463
56.63	never_sm	389	251.60	never_sm	599
56.75	never_sm	566	266.59	never_sm	388
57.28	never_sm	582	267.60	never_sm	427



SAS Program for smoke type groups on avg glucose level CRD

The UNIVARIATE Procedure
Variable: X3 (X3 - avg_glucose_level)

X1 - smoker_type=smokes

Moments			
N	300	Sum Weights	300
Mean	110.2235	Sum Observations	33067.05
Std Deviation	50.6466704	Variance	2565.08522
Skewness	1.52734062	Kurtosis	1.32995336
Uncorrected SS	4411726.47	Corrected SS	766960.481
Coeff Variation	45.9490675	Std Error Mean	2.92408688

Basic Statistical Measures			
Location		Variability	
Mean	110.2235	Std Deviation	50.64667
Median	93.3700	Variance	2565
Mode	60.7700	Range	212.29000
		Interquartile Range	39.30000

Note: The mode displayed is the smallest of 4 modes with a count of 2.

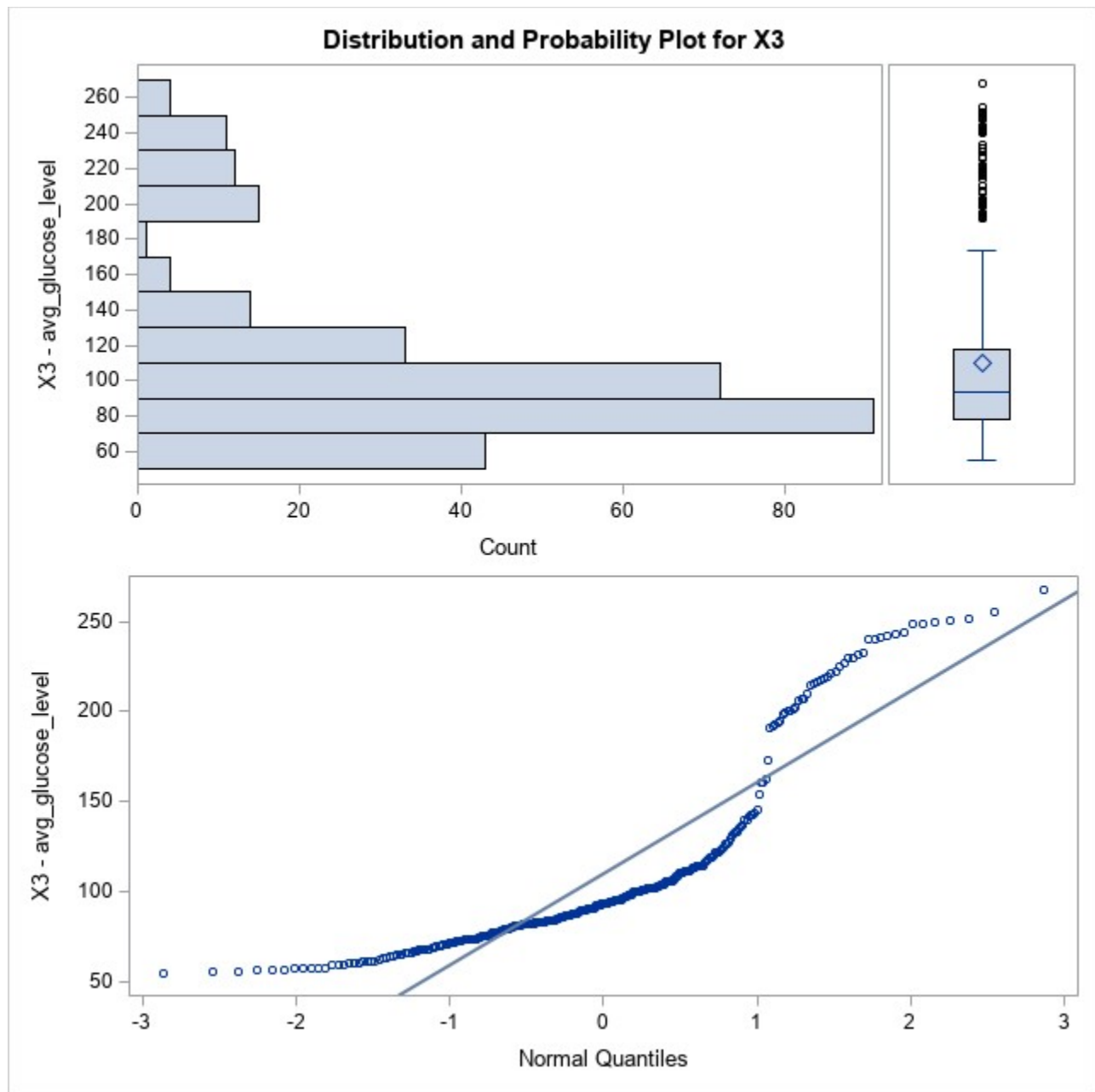
Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	37.69502	Pr > t 	<.0001
Sign	M	150	Pr >= M 	<.0001
Signed Rank	S	22575	Pr >= S 	<.0001

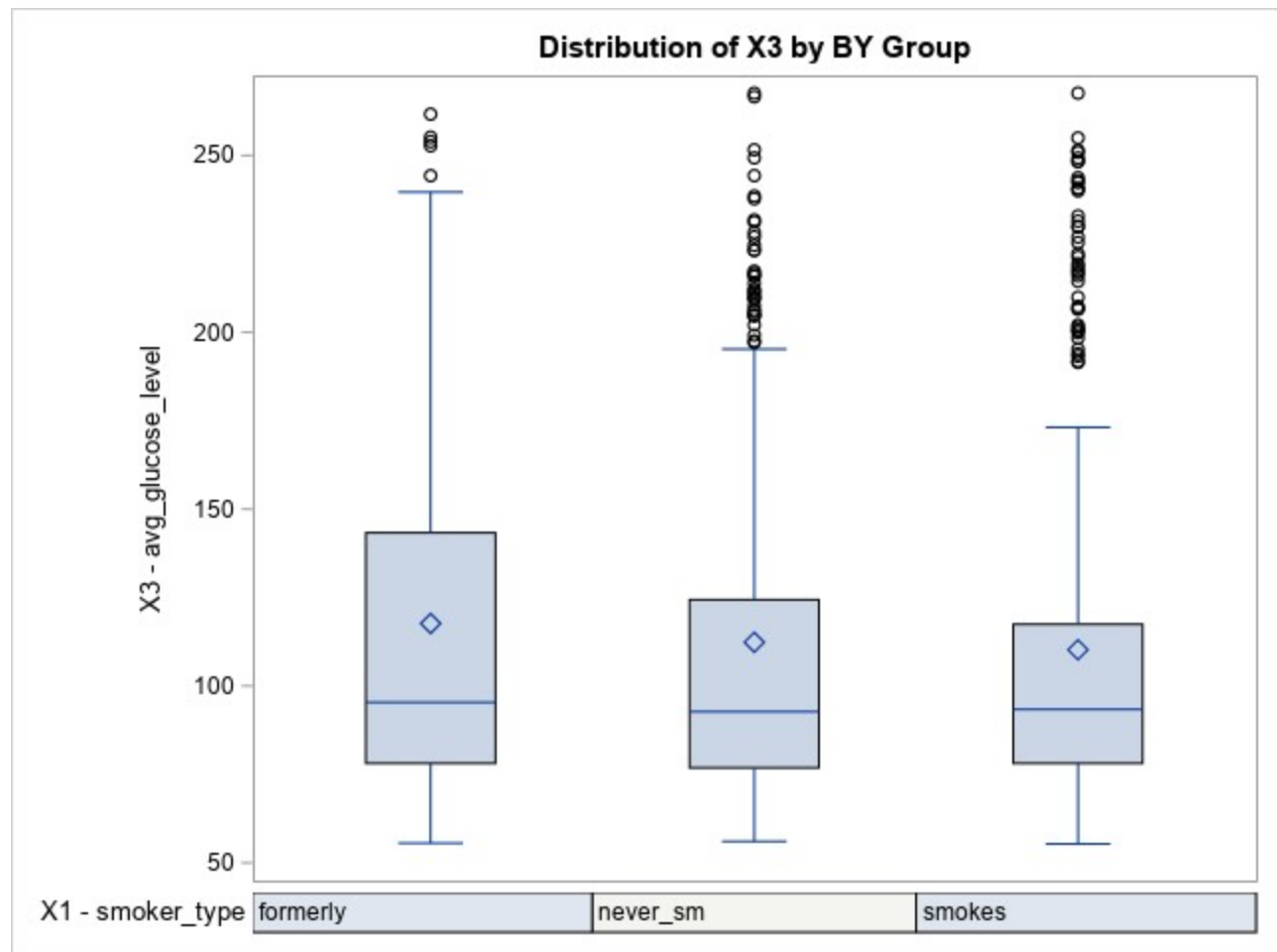
Tests for Normality				
Test	Statistic		p Value	
Shapiro-Wilk	W	0.792585	Pr < W	<0.0001
Kolmogorov-Smirnov	D	0.209374	Pr > D	<0.0100
Cramer-von Mises	W-Sq	4.100583	Pr > W-Sq	<0.0050
Anderson-Darling	A-Sq	23.29942	Pr > A-Sq	<0.0050

Quantiles (Definition 5)

Level	Quantile
100% Max	267.610
99%	251.175
95%	230.675
90%	206.590
75% Q3	117.440
50% Median	93.370
25% Q1	78.140
10%	65.925
5%	60.730
1%	56.245
0% Min	55.320

Extreme Observations					
Lowest			Highest		
Value	X1	Obs	Value	X1	Obs
55.32	smokes	842	249.29	smokes	878
55.47	smokes	654	250.89	smokes	719
56.12	smokes	649	251.46	smokes	821
56.37	smokes	640	254.95	smokes	753
56.89	smokes	605	267.61	smokes	880





SAS Program for smoke type groups on avg glucose level CRD**The GLM Procedure**

Class Level Information		
Class	Levels	Values
X1	3	formerly never_sm smokes

Number of Observations Read	900
Number of Observations Used	900

SAS Program for smoke type groups on avg glucose level CRD

The GLM Procedure

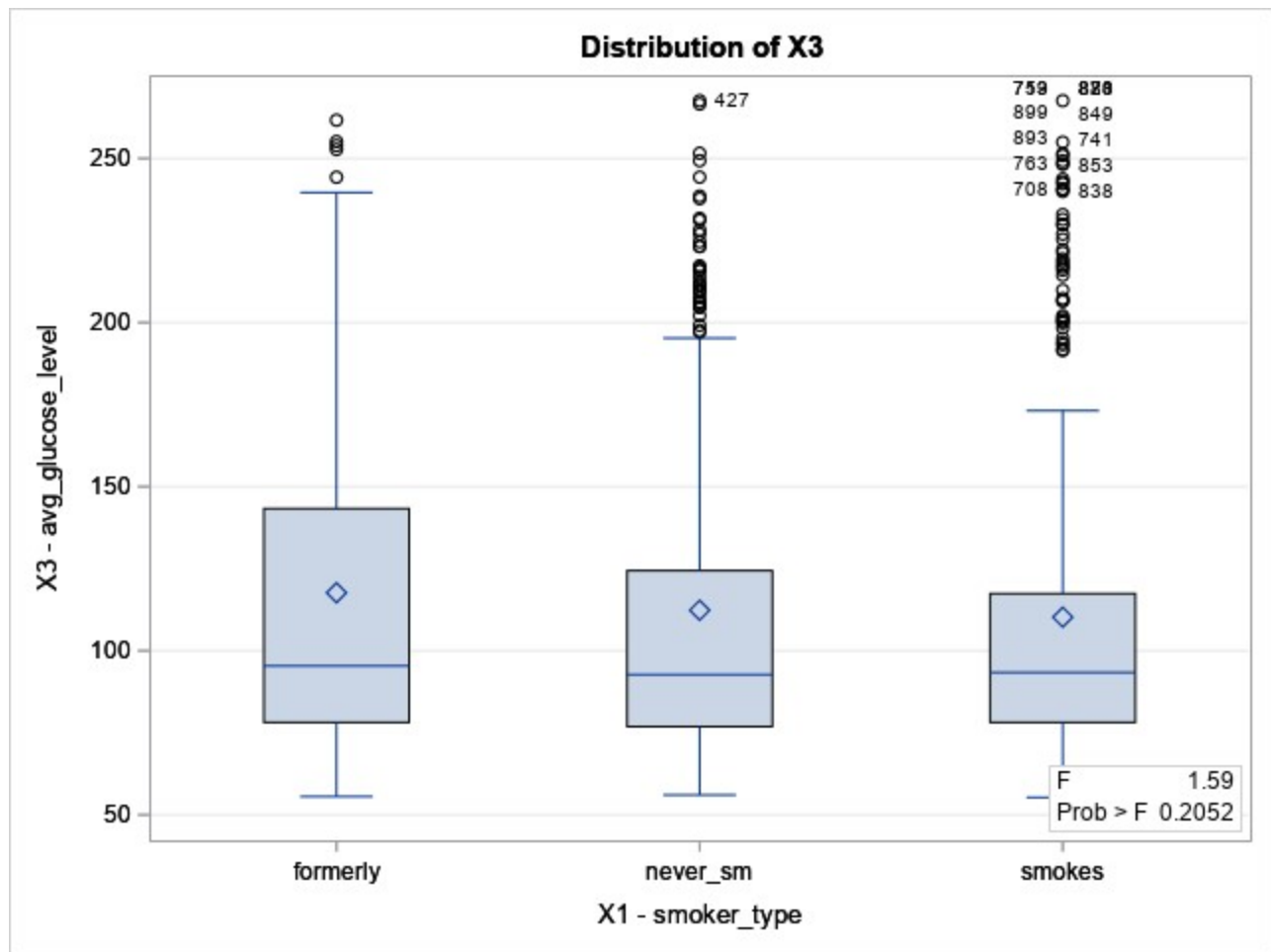
Dependent Variable: X3 X3 - avg_glucose_level

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	8808.233	4404.117	1.59	0.2052
Error	897	2489841.094	2775.743		
Corrected Total	899	2498649.327			

R-Square	Coeff Var	Root MSE	X3 Mean
0.003525	46.45443	52.68532	113.4129

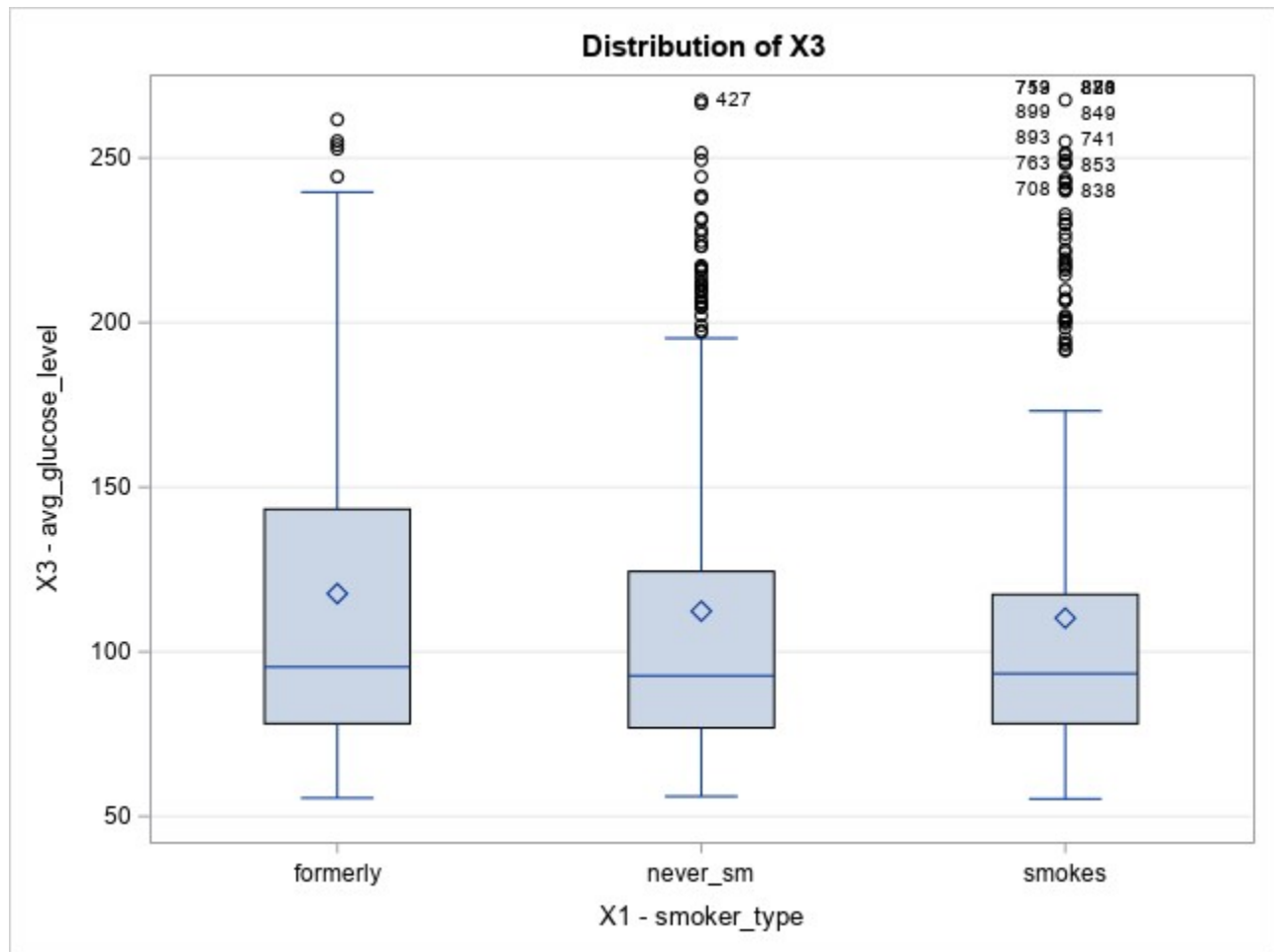
Source	DF	Type I SS	Mean Square	F Value	Pr > F
X1	2	8808.233272	4404.116636	1.59	0.2052

Source	DF	Type III SS	Mean Square	F Value	Pr > F
X1	2	8808.233272	4404.116636	1.59	0.2052



SAS Program for smoke type groups on avg glucose level CRD

The GLM Procedure



Level of X1	N	X3	
		Mean	Std Dev
formerly	300	117.663000	56.4667630
never_sm	300	112.352167	50.7311264
smokes	300	110.223500	50.6466704

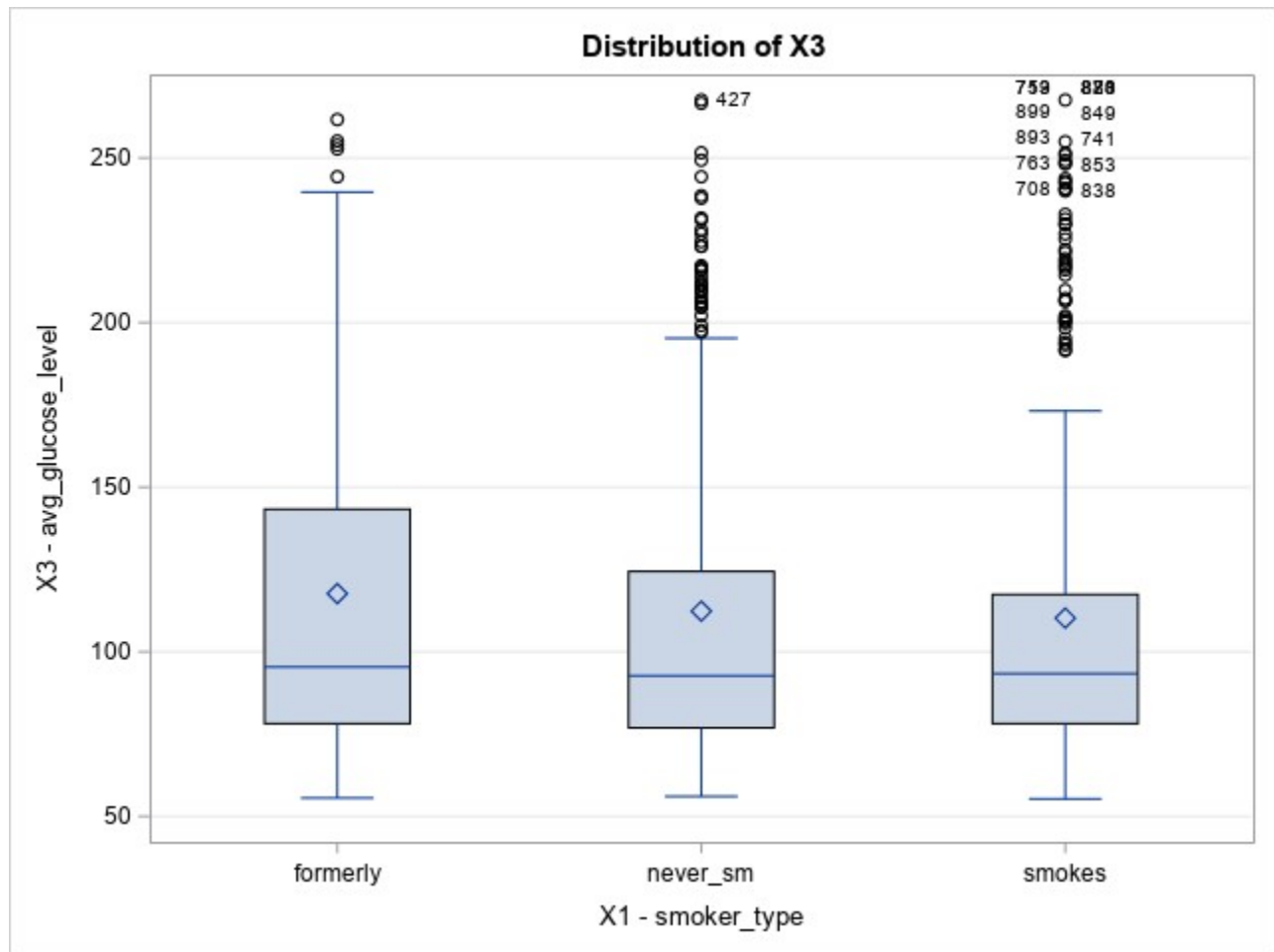
SAS Program for smoke type groups on avg glucose level CRD**The GLM Procedure**

Levene's Test for Homogeneity of X3 Variance ANOVA of Squared Deviations from Group Means					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
X1	2	76164854	38082427	2.11	0.1224
Error	897	1.622E10	18086444		

Welch's ANOVA for X3			
Source	DF	F Value	Pr > F
X1	2.0000	1.49	0.2253
Error	596.6		

SAS Program for smoke type groups on avg glucose level CRD

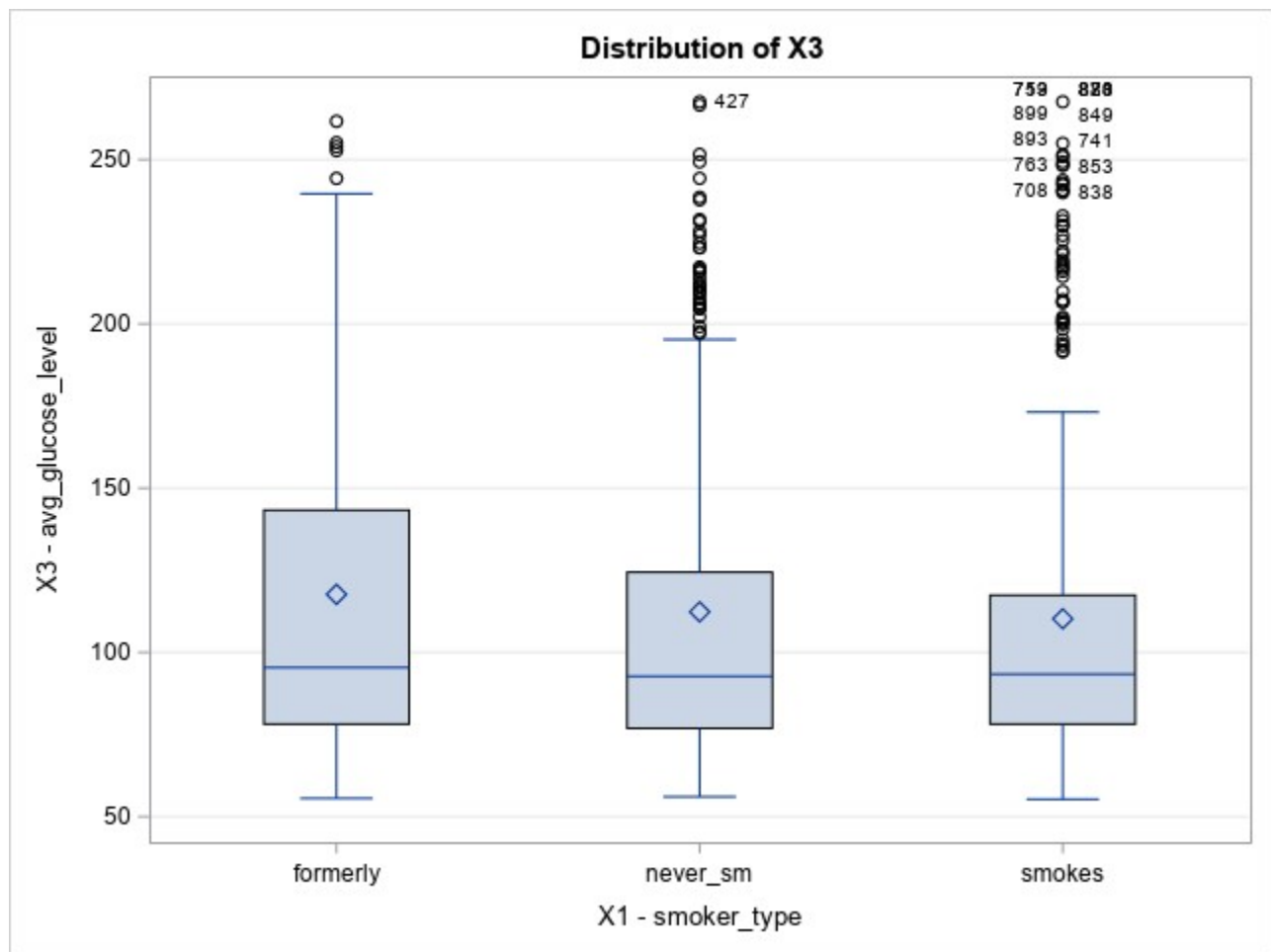
The GLM Procedure



Level of X1	N	X3	
		Mean	Std Dev
formerly	300	117.663000	56.4667630
never_sm	300	112.352167	50.7311264
smokes	300	110.223500	50.6466704

SAS Program for smoke type groups on avg glucose level CRD**The GLM Procedure**

Brown and Forsythe's Test for Homogeneity of X3 Variance ANOVA of Absolute Deviations from Group Medians					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
X1	2	8348.8	4174.4	2.34	0.0972
Error	897	1602173	1786.1		

SAS Program for smoke type groups on avg glucose level CRD**The GLM Procedure**

SAS Program for smoke type groups on avg glucose level CRD

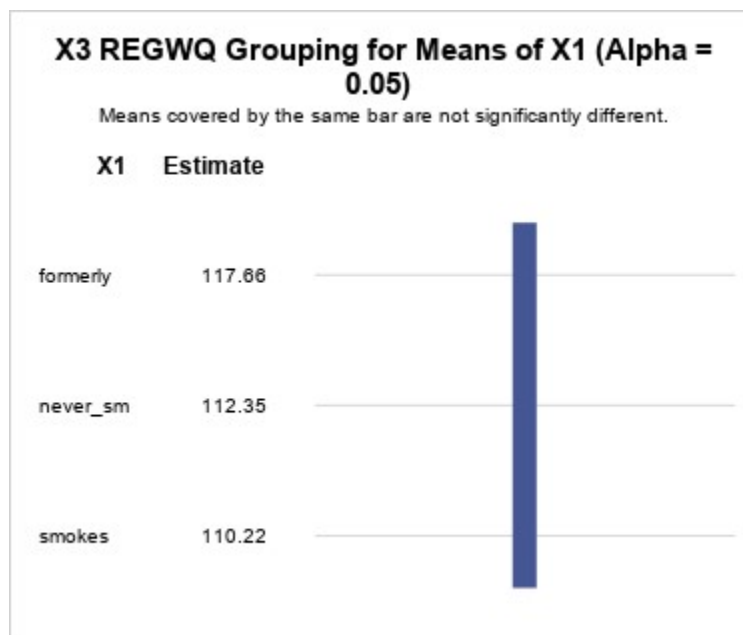
The GLM Procedure

Ryan-Einot-Gabriel-Welsch Multiple Range Test for X3

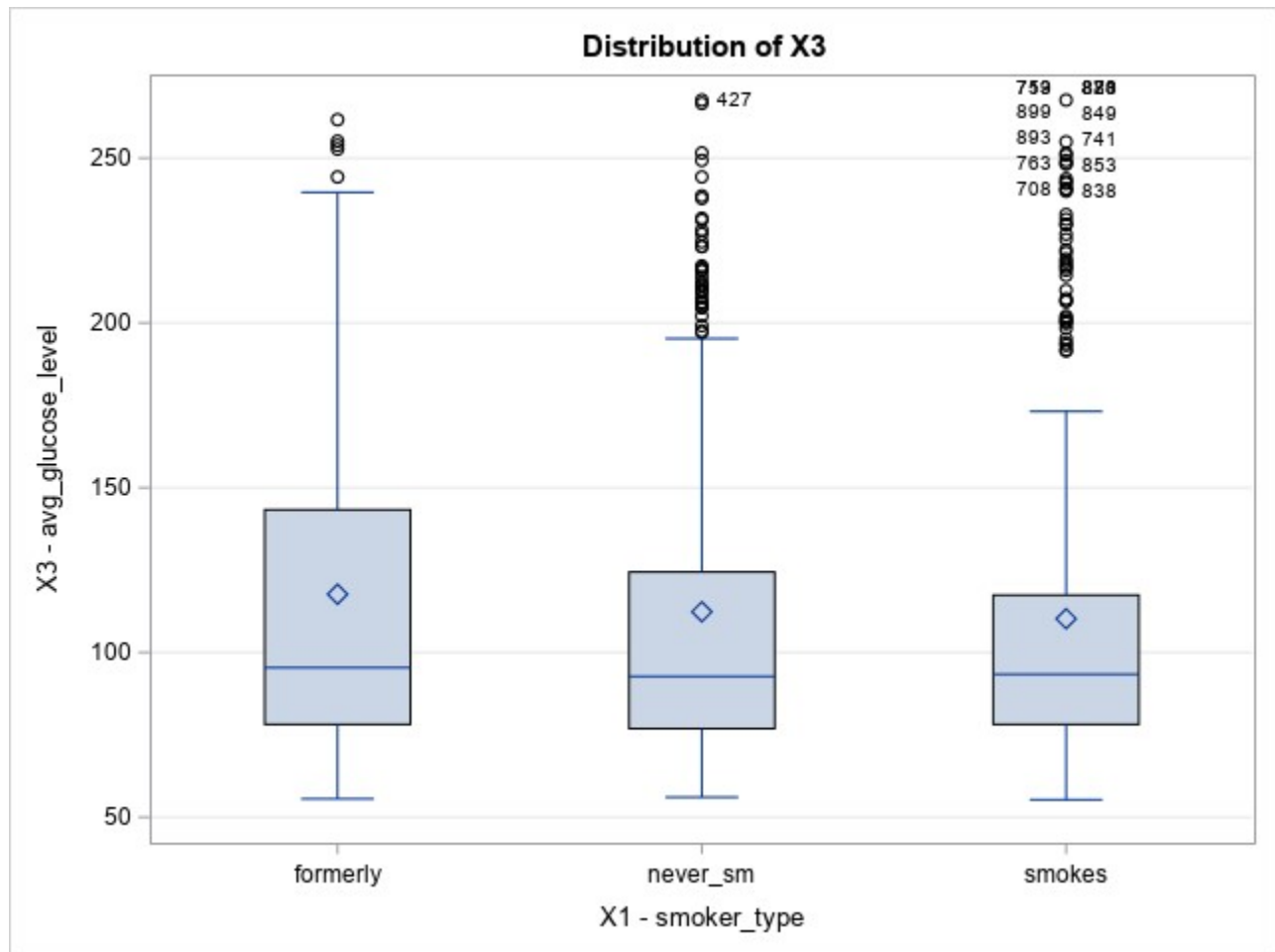
Note: This test controls the Type I experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	897
Error Mean Square	2775.743

Number of Means	2	3
Critical Range	8.4426446	10.098782



The GLM Procedure



SAS Program for smoke type groups on avg glucose level CRD

The GLM Procedure

t Tests (LSD) for X3

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	897
Error Mean Square	2775.743
Critical Value of t	1.96261
Least Significant Difference	8.4426

Comparisons significant at the 0.05 level are indicated by ***.				
X1 Comparison	Difference Between Means	95% Confidence Limits		
formerly - never_sm	5.311	-3.132	13.753	
formerly - smokes	7.439	-1.003	15.882	
never_sm - formerly	-5.311	-13.753	3.132	
never_sm - smokes	2.129	-6.314	10.571	
smokes - formerly	-7.439	-15.882	1.003	
smokes - never_sm	-2.129	-10.571	6.314	

SAS Program for smoke type groups on avg glucose level CRD

The GLM Procedure

Tukey's Studentized Range (HSD) Test for X3

Note: This test controls the Type I experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	897
Error Mean Square	2775.743
Critical Value of Studentized Range	3.32001
Minimum Significant Difference	10.099

Comparisons significant at the 0.05 level are indicated by ***.				
X1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
formerly - never_sm	5.311	-4.788	15.410	
formerly - smokes	7.439	-2.659	17.538	
never_sm - formerly	-5.311	-15.410	4.788	
never_sm - smokes	2.129	-7.970	12.227	
smokes - formerly	-7.439	-17.538	2.659	
smokes - never_sm	-2.129	-12.227	7.970	

SAS Program for smoke type groups on avg glucose level CRD

The GLM Procedure

Bonferroni (Dunn) t Tests for X3

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than Tukey's for all pairwise comparisons.

Alpha	0.05
Error Degrees of Freedom	897
Error Mean Square	2775.743
Critical Value of t	2.39848
Minimum Significant Difference	10.318

Comparisons significant at the 0.05 level are indicated by ***.				
X1 Comparison	Difference Between Means	Simultaneous 95% Confidence Limits		
formerly - never_sm	5.311	-5.007	15.628	
formerly - smokes	7.439	-2.878	17.757	
never_sm - formerly	-5.311	-15.628	5.007	
never_sm - smokes	2.129	-8.189	12.446	
smokes - formerly	-7.439	-17.757	2.878	
smokes - never_sm	-2.129	-12.446	8.189	