

Fig 1: Mean blood concentration of curcumin (ng/gm) Vs Time in human subjects after administering sustained release curcuminoid formulation coated with ethyl cellulose in 10:1 ratio

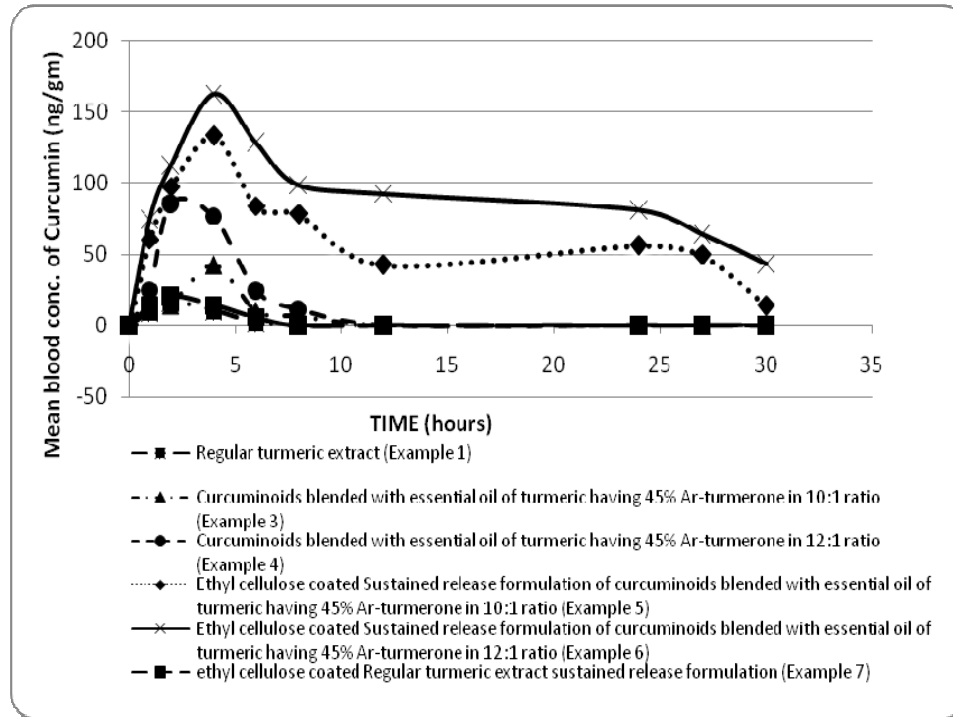


Fig 2: Mean blood concentration of DMC (ng/gm) Vs Time in human subjects after administering sustained release curcuminoid formulation coated with ethyl cellulose in 10:1 ratio

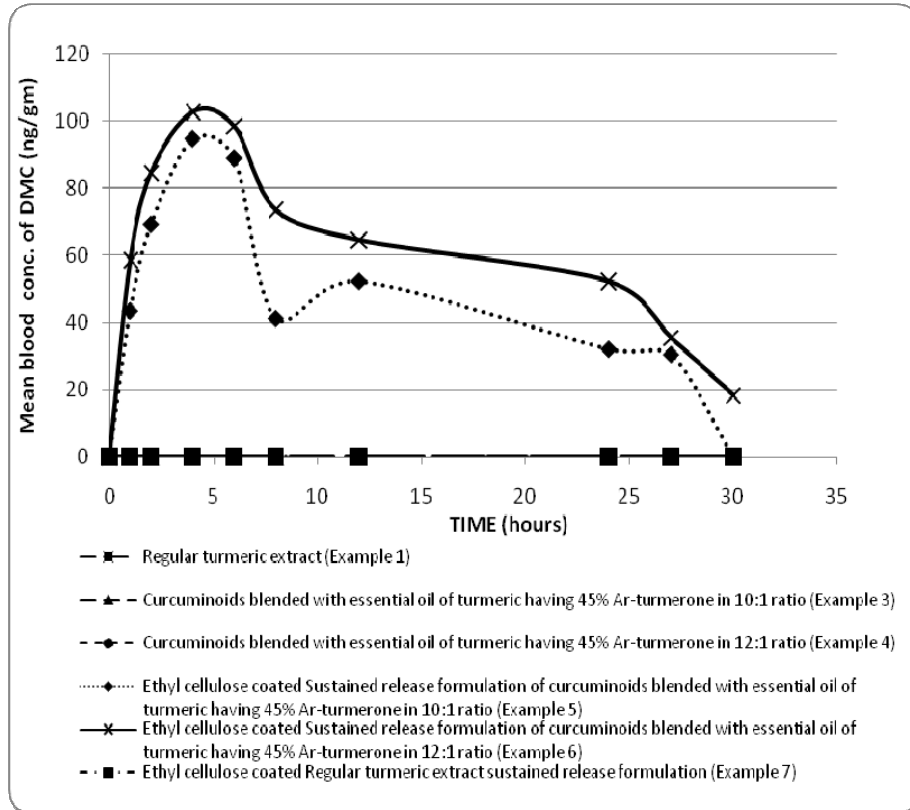


Fig 3: Mean blood concentration of BDMC (ng/gm) Vs Time in human subjects after administering sustained release curcuminoid formulation coated with ethyl cellulose in 10:1 ratio

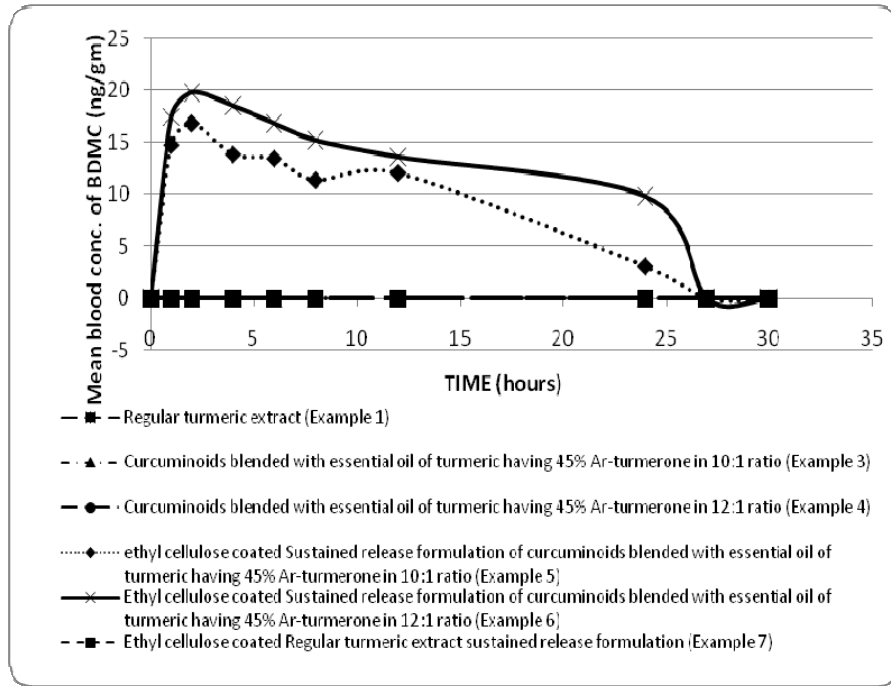


Fig 4: Mean blood concentration of curcumin (ng/gm) Vs Time in human subjects after administering sustained release curcuminoid formulation coated with ethyl cellulose in 500:25ratio

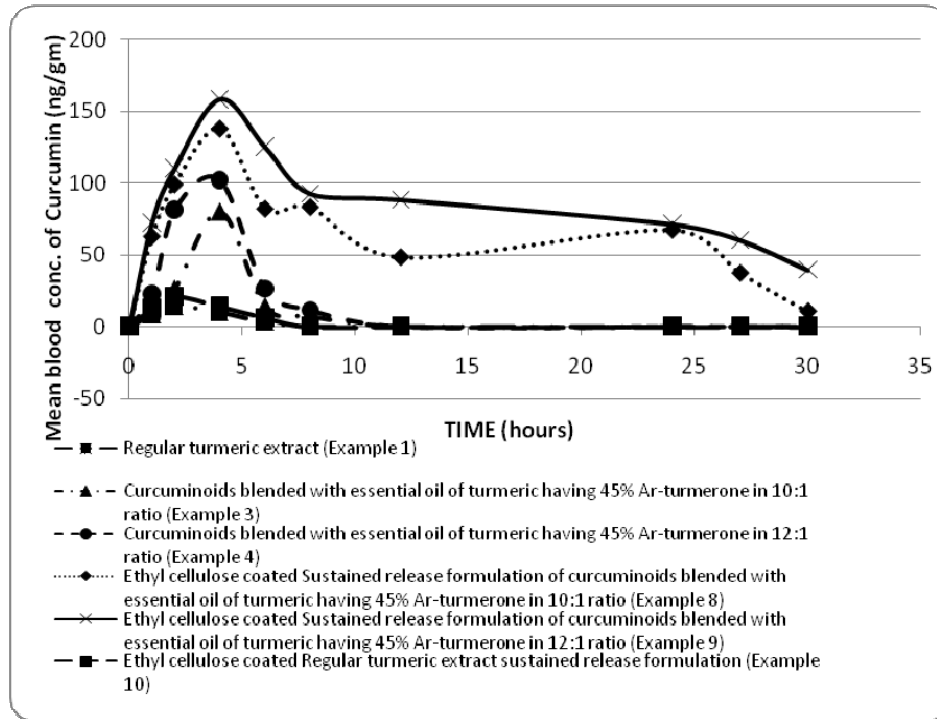


Fig 5: Mean blood concentration of DMC (ng/gm) Vs Time in human subjects after administering sustained release curcuminoid formulation coated with ethyl cellulose in 500:25ratio

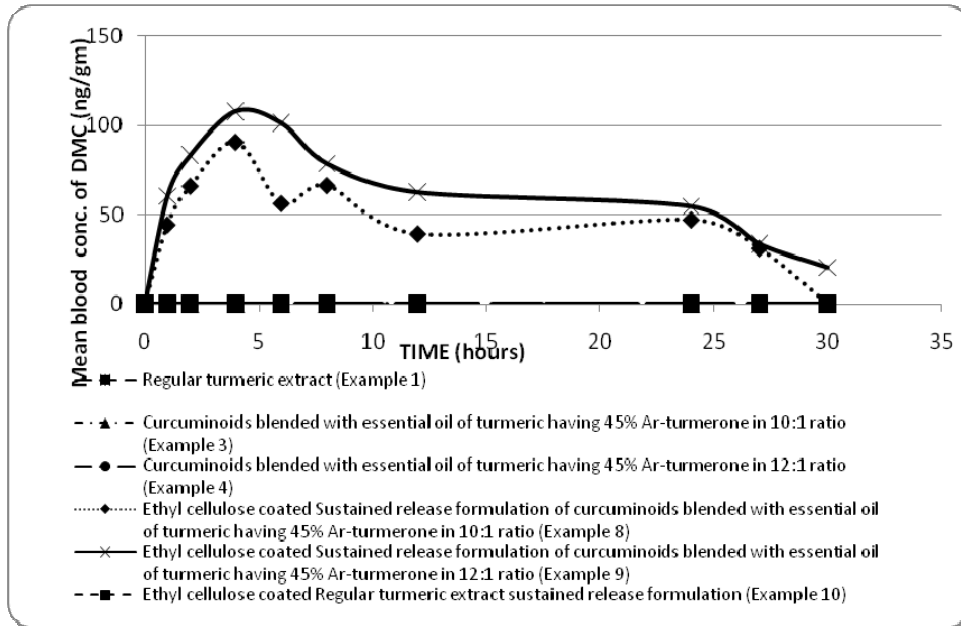


Fig 6: Mean blood concentration of BDMC (ng/gm) Vs Time in human subjects after administering sustained release curcuminoid formulation coated with ethyl cellulose in 500:25ratio

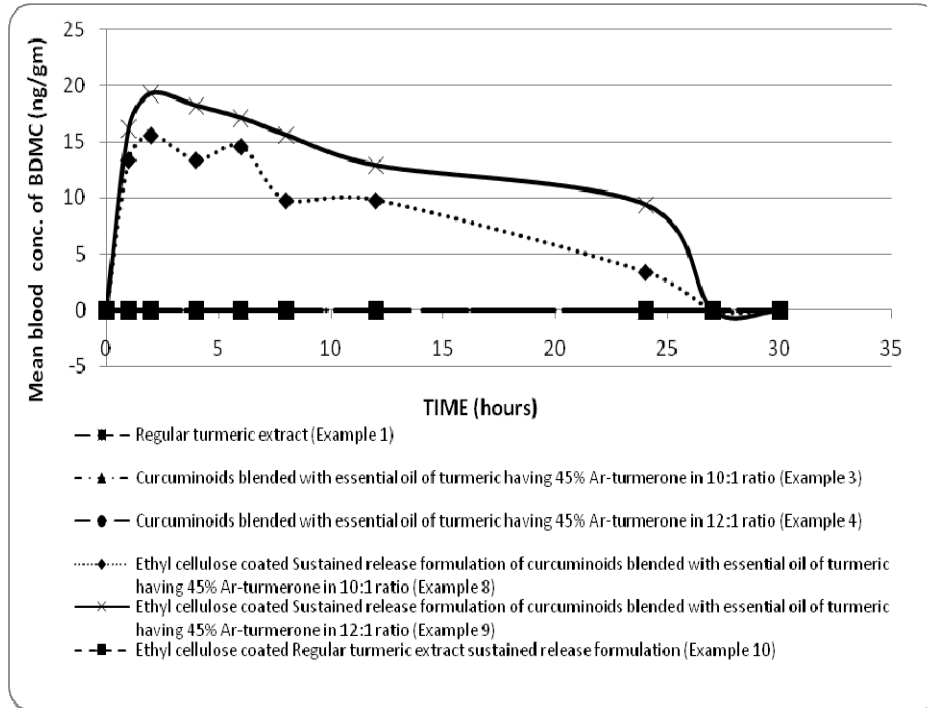


Fig 7: Mean blood concentration of curcumin (ng/gm) Vs Time in human subjects after administering sustained release curcuminoid formulation coated with shellac in 10:1 ratio

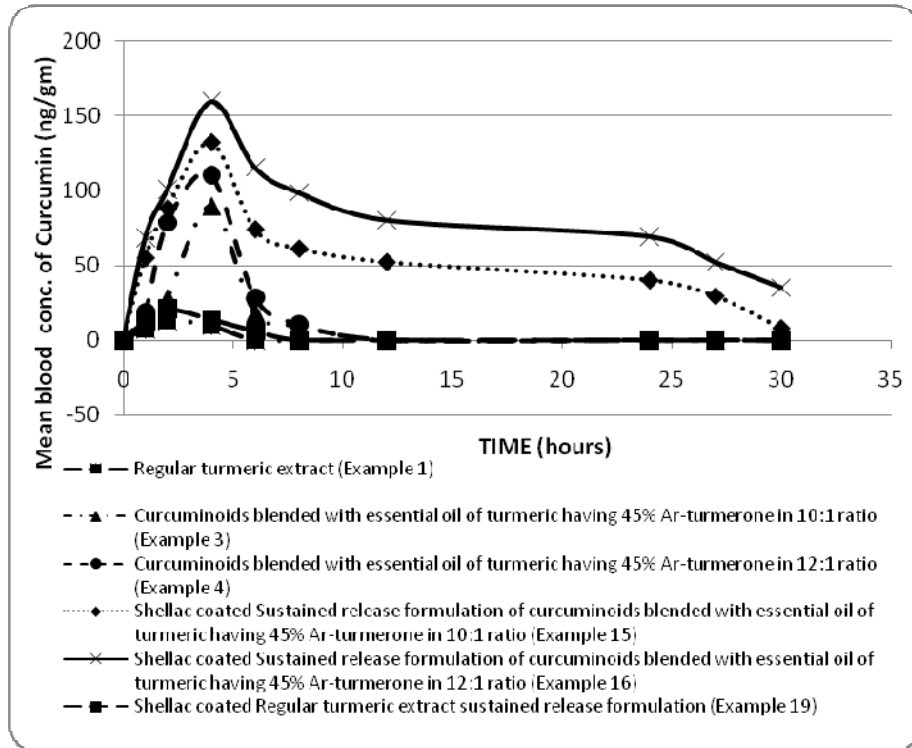


Fig 8: Mean blood concentration of demethoxy curcumin(DMC) (ng/gm) Vs Time in human subjects after administering sustained release curcuminoid formulation coated with shellac in 10:1 ratio

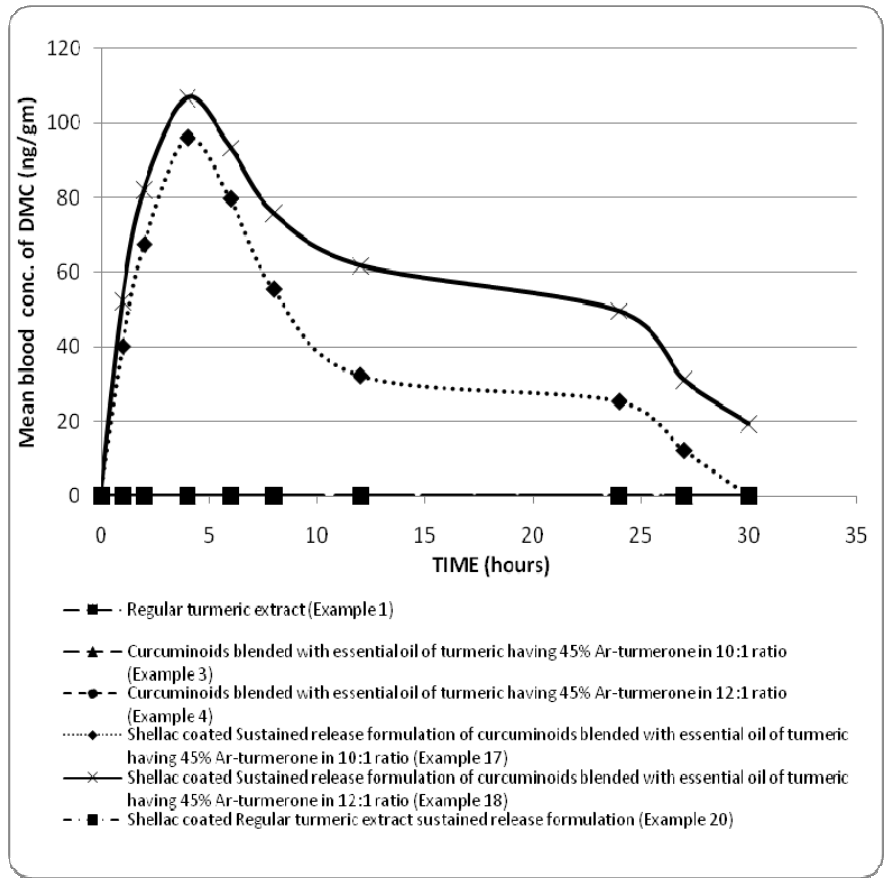


Fig 9: Mean blood concentration of bisdemethoxy curcumin(BDMC) (ng/gm) Vs Time in human subjects after administering sustained release curcuminoid formulation coated with shellac in 10:1 ratio

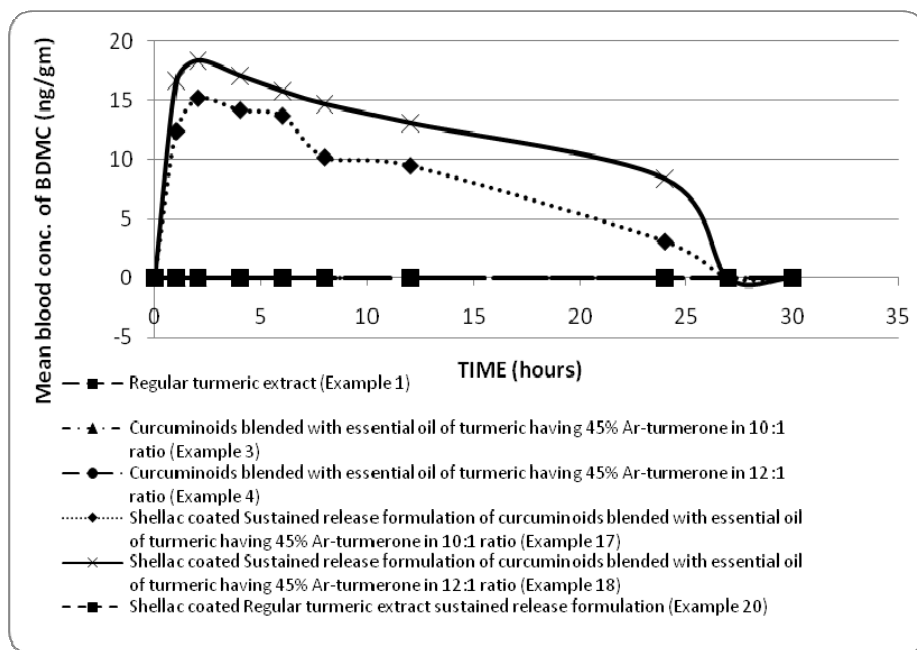


Fig 10: Mean blood concentration of curcumin (ng/gm) Vs Time in human subjects after administering sustained release curcuminoid formulation coated with shellac in 14:1 ratio.

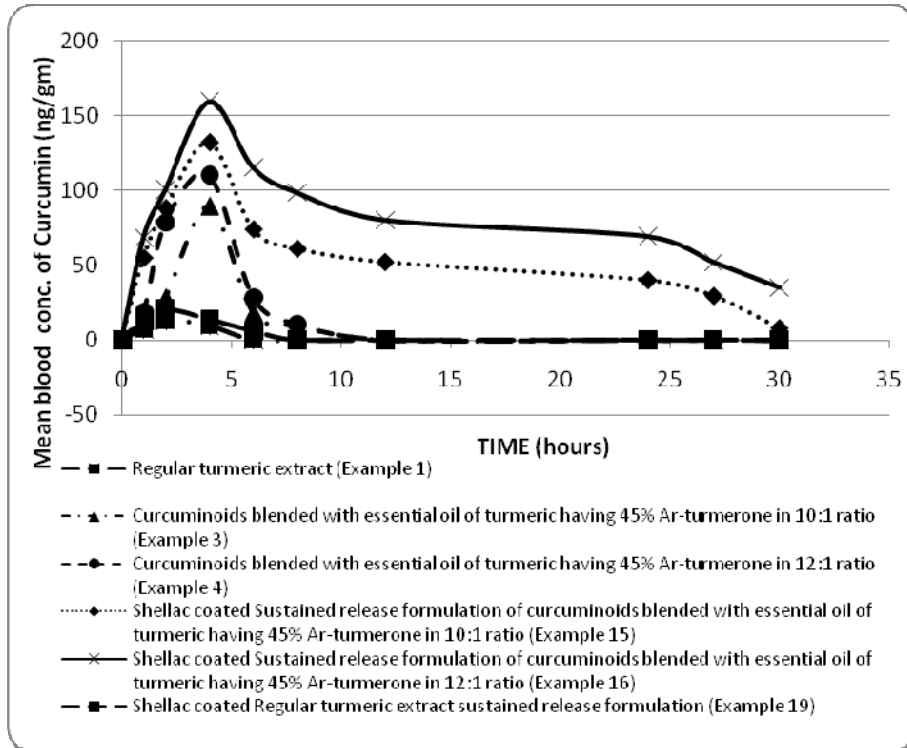


Fig 11: Mean blood concentration of demethoxy curcumin(DMC) (ng/gm) Vs Time in human subjects after administering sustained release curcuminoid formulation coated with shellac in 14:1 ratio

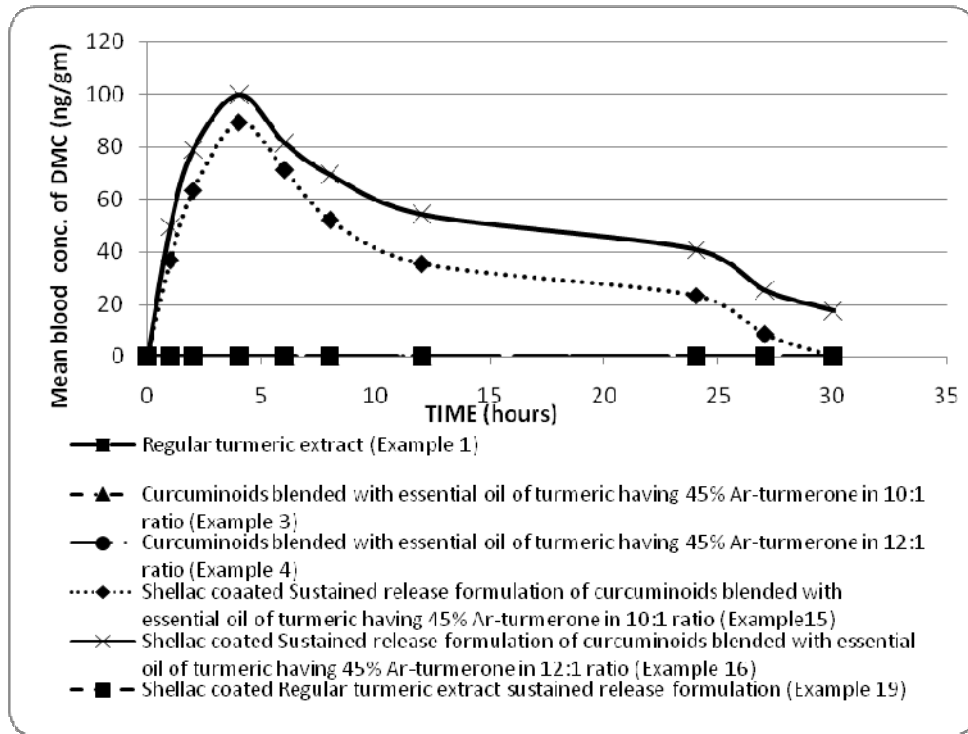


Fig 12: Mean blood concentration of bisdemethoxy curcumin(BDMC) (ng/gm) Vs Time in human subjects after administering sustained release curcuminoid formulation coated with shellac in 14:1 ratio

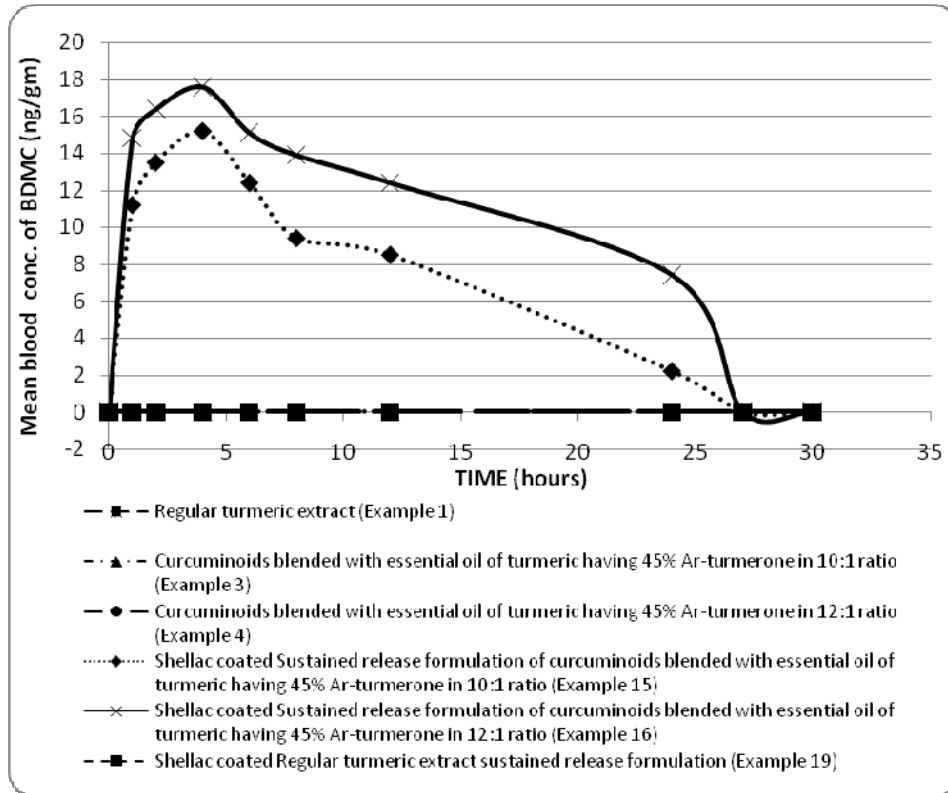


Fig 13: Mean blood concentration of curcumin (ng/gm) Vs Time in human subjects after administering a formulation contain bioavailable curcumin formulation and shellac coated sustained release curcuminoid formulation and ethyl cellulose coated sustained release curcuminoid formulation in different ratios.

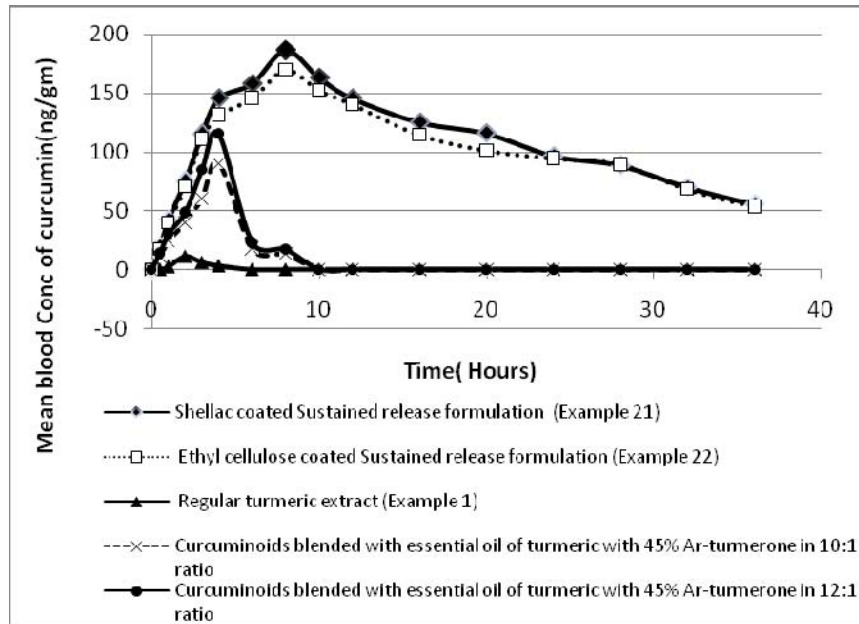


Fig 14: Mean blood concentration of demethoxy curcumin(DMC) (ng/gm) Vs Time in human subjects after administering a formulation contain bioavailable curcumin formulation and shellac coated sustained release curcuminoid formulation and ethyl cellulose coated sustained release curcuminoid formulation in different ratios.

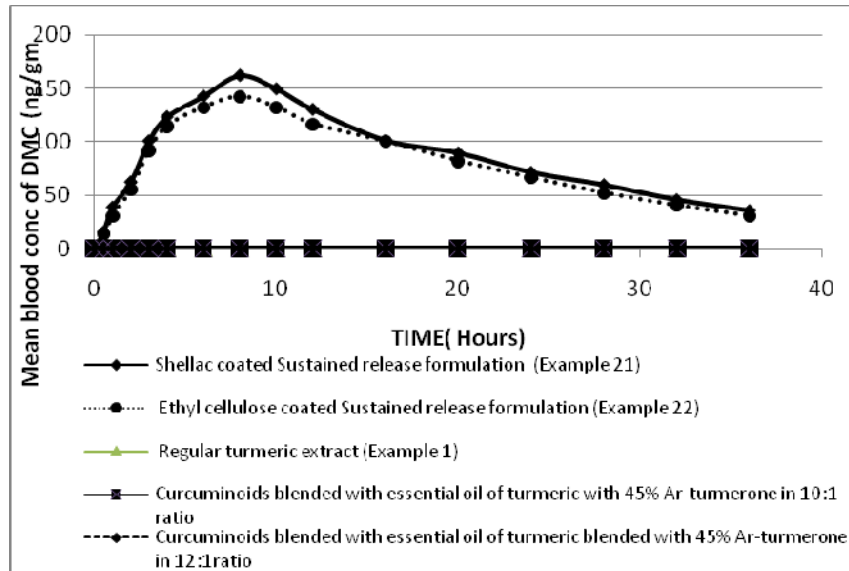


Fig 15: Mean blood concentration of bis demethoxy curcumin(BDMC) (ng/gm) Vs Time in human subjects after administering a formulation contain bioavailable curcumin formulation and shellac coated sustained release curcuminoid formulation and ethyl cellulose coated sustained release curcuminoid formulation in different ratios.

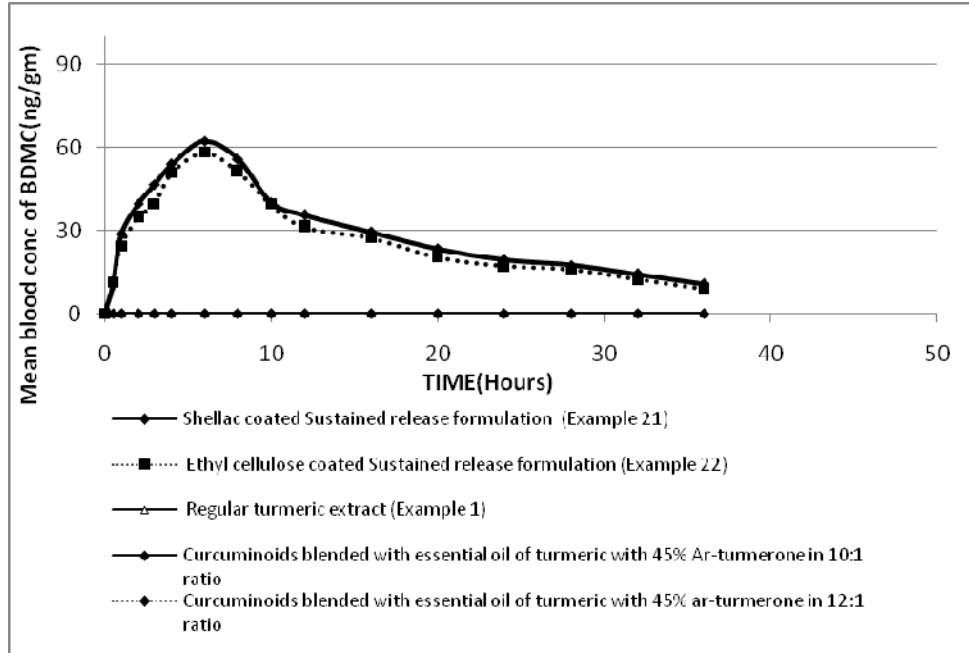


Fig 16: Mean blood concentration of curcumin (ng/gm) Vs Time in human subjects after administering sustained release curcuminoid formulation coated with ethyl cellulose in 10:1 ratio(example 26 Table 23 a)

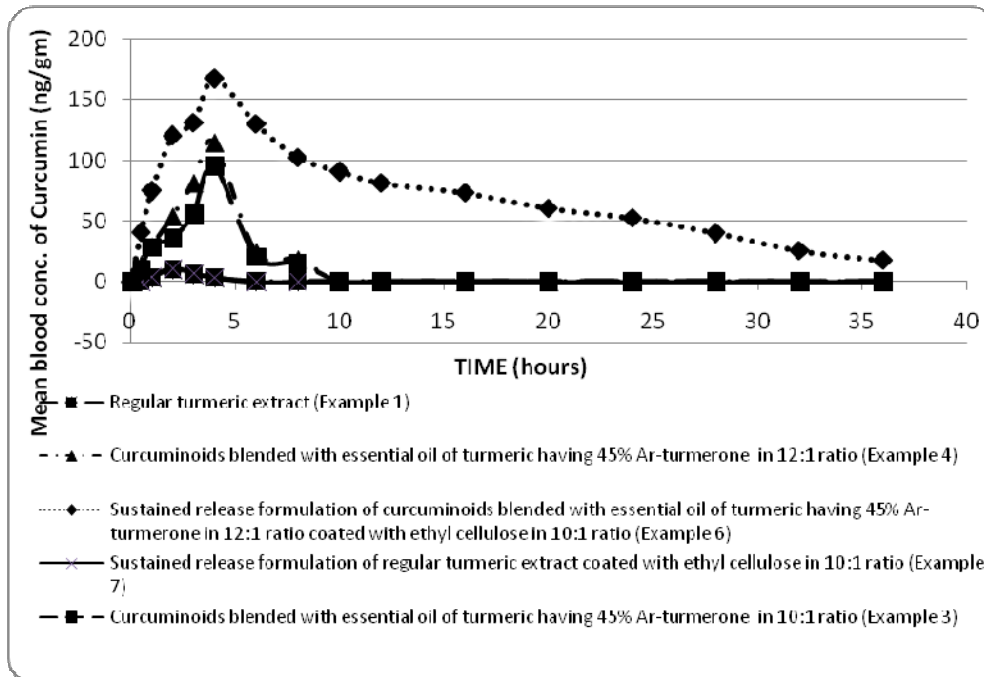


Fig 17: Mean blood concentration of DMC (ng/gm) Vs Time in human subjects after administering sustained release curcuminoid formulation coated with ethyl cellulose in 10:1 ratio(example 26 Table 23 a)

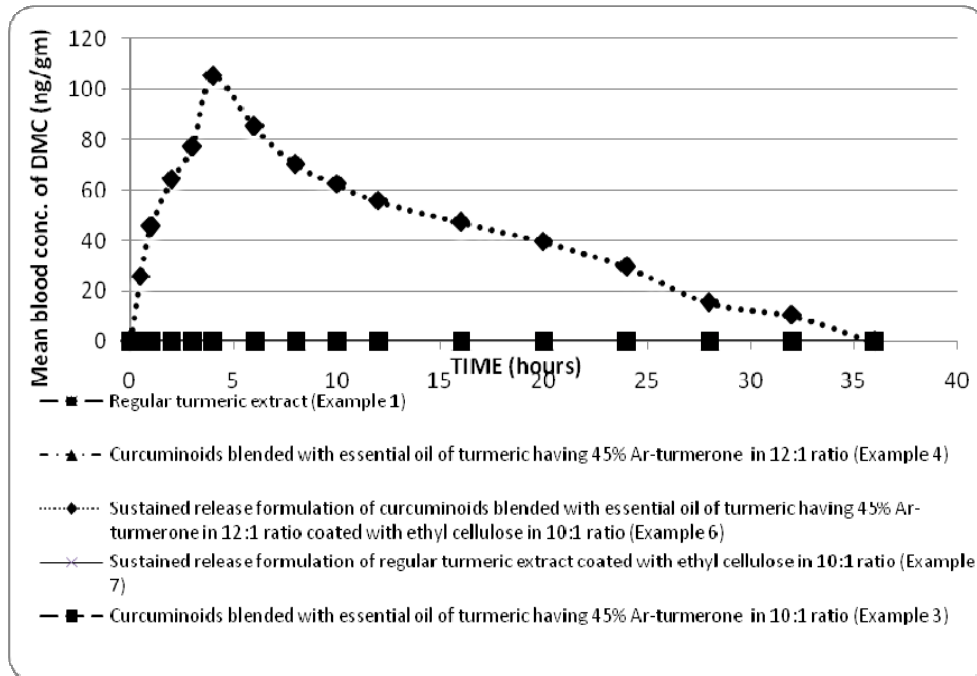


Fig 18: Mean blood concentration of BDMC (ng/gm) Vs Time in human subjects after administering sustained release curcuminoid formulation coated with ethyl cellulose in 10:1 ratio(example 26,Table 23 a)

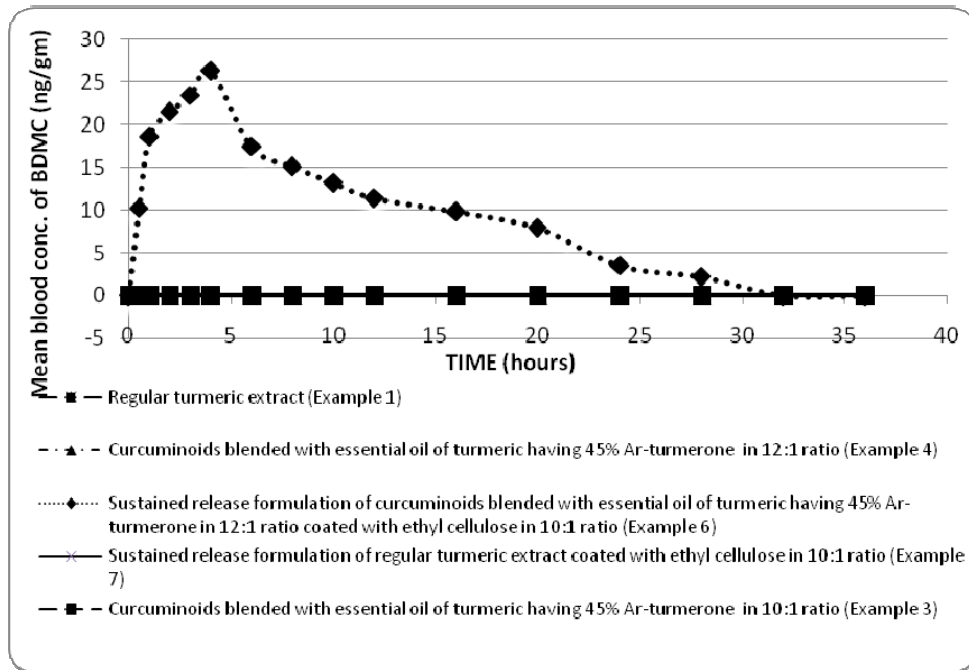


Fig 19: Mean blood concentration of curcumin (ng/gm) Vs Time in human subjects after administering sustained release curcuminoid formulation coated with shellac in 10:1 ratio(example 26 Table 23 b)

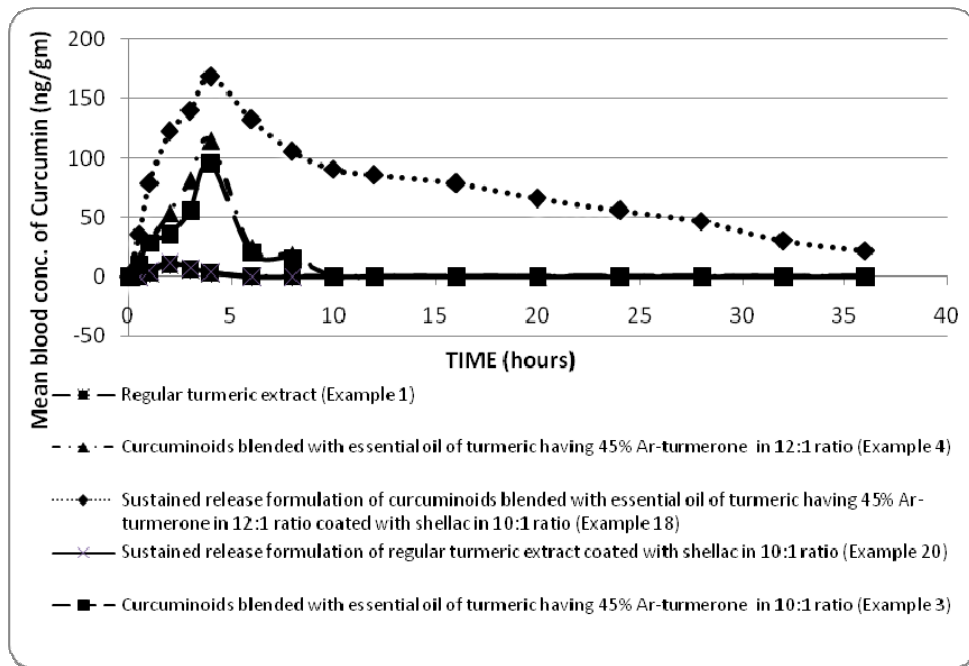


Fig 20: Mean blood concentration of DMC (ng/gm) Vs Time in human subjects after administering sustained release curcuminoid formulation coated with shellac in 10:1 ratio(example 26 Table 23 b)

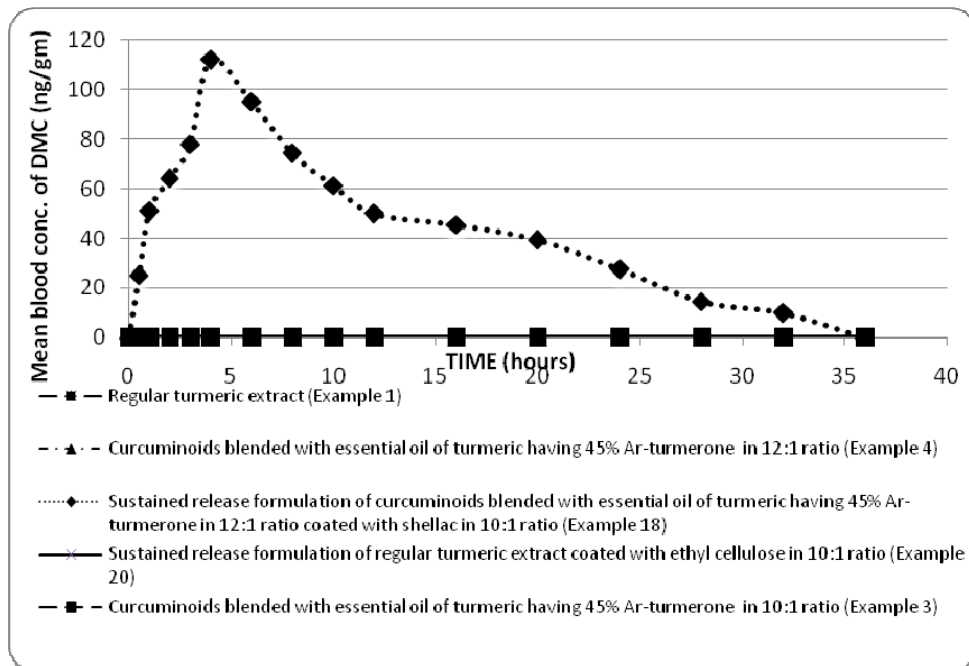


Fig 21: Mean blood concentration of BDMC (ng/gm) Vs Time in human subjects after administering sustained release curcuminoid formulation coated with shellac in 10:1 ratio(example 26,Table 23 b)

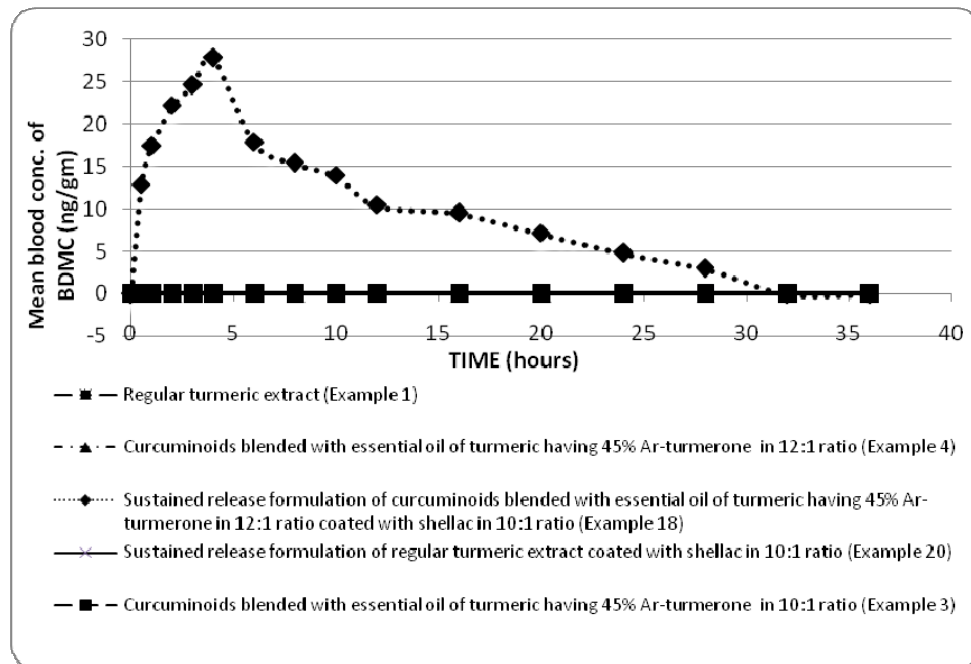


Fig 22: T half (Hours) of Sustained release groups, regular turmeric extract and curcuminoids blended with essential oil of turmeric in 10:1 and 12:1 ratios as per example 27.

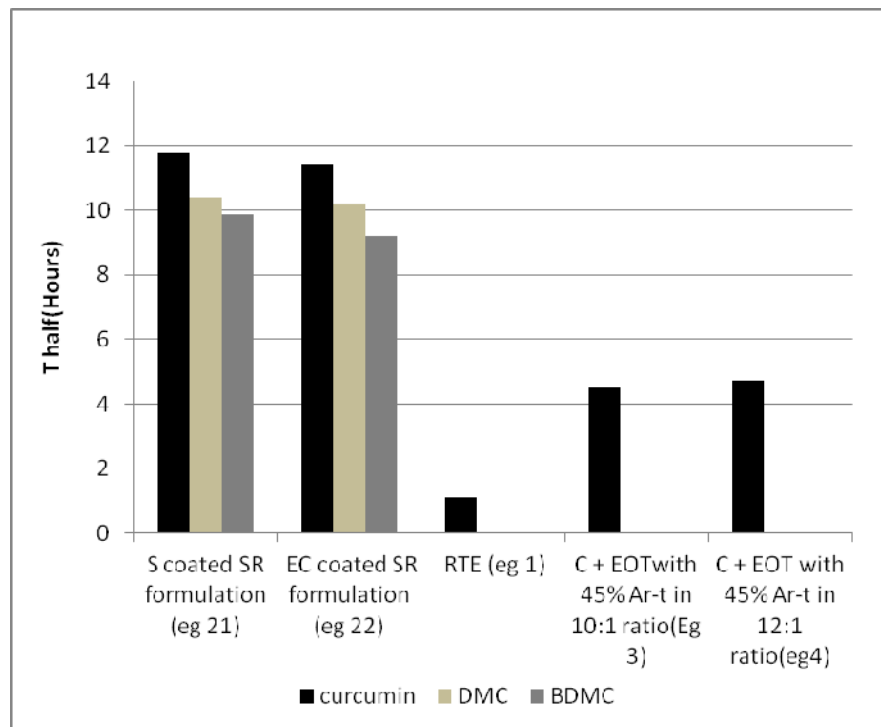


Fig 23: AUC (nanogram per gram) of Sustained release groups, regular turmeric extract and curcuminoids blended with essential oil of turmeric in 10:1 and 12:1 ratios as per example 27.

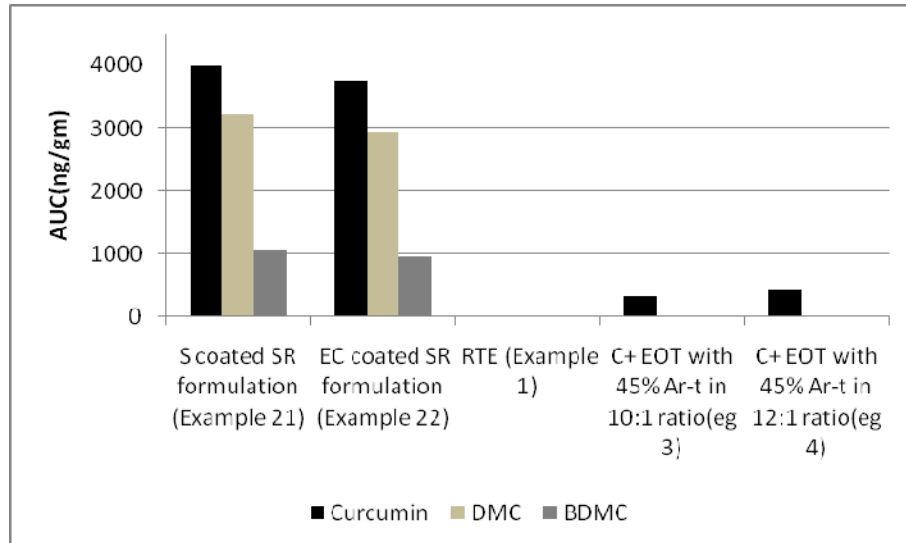


Fig 24: T half (Hours) of Sustained release groups, regular turmeric extract and curcuminoids blended with essential oil of turmeric in 10:1 and 12:1 ratios as per example 26.

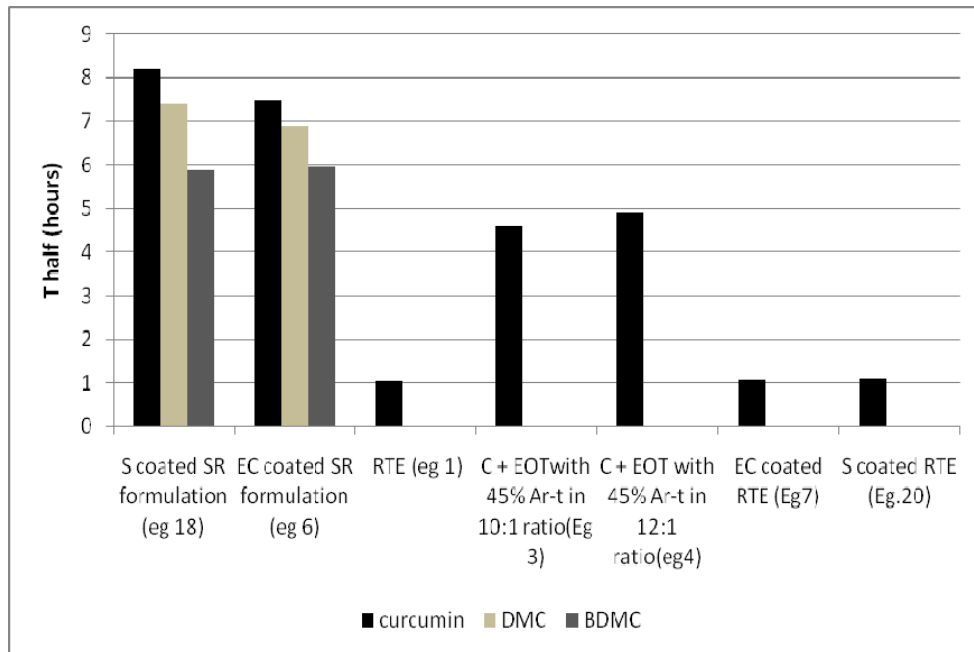


Fig 25: AUC(ng/gm) of Sustained release groups, regular turmeric extract and curcuminoids blended with essential oil of turmeric in 10:1 and 12:1 ratios as per example 26.

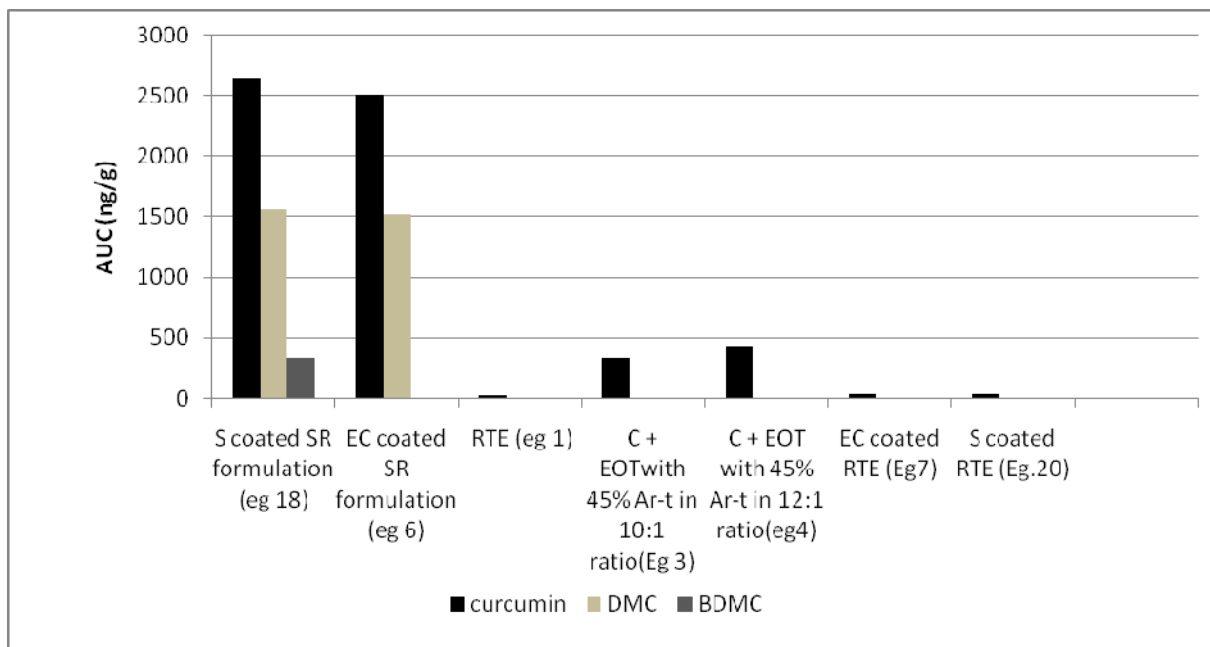


Fig 26: Table 20(a): Mean blood concentration of curcumin, demethoxy curcumin and bisdemethoxy curcumin in healthy human subjects

Time (hours)	Mean blood concentration of curcuminoids (ng/gm of blood)																	
	Regular turmeric extract (Example 1)			Curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone in 10:1 ratio (Example 3)			Curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone in 12:1 ratio (Example 4)			Sustained release formulation of curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone in 10:1 ratio coated with ethyl cellulose in 10:1 ratio (Example 5)			Sustained release formulation of curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone in 12:1 ratio coated with ethyl cellulose in 10:1 ratio (Example 6)			Sustained release formulation of Regular turmeric extract coated with ethyl cellulose in 10:1 ratio (Example 7)		
	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC
0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1	8.2	ND	ND	11.2	ND	ND	22.3	ND	ND	60.3	43.5	14.8	74.5	58.5	17.4	13.6	ND	ND
2	14.5	ND	ND	26.2	ND	ND	81.3	ND	ND	97.4	69.2	16.9	112.3	84.6	19.8	20.8	ND	ND
4	10.2	ND	ND	80.3	ND	ND	102.1	ND	ND	133.4	94.7	13.9	162.5	102.8	18.5	14.4	ND	ND
6	3.2	ND	ND	14.1	ND	ND	26.2	ND	ND	83.7	88.9	13.5	128.5	98.4	16.8	5.6	ND	ND
8	ND	ND	ND	7.1	ND	ND	11.5	ND	ND	78.3	41.2	11.4	98.6	73.5	15.2	ND	ND	ND
12	ND	ND	ND	ND	ND	ND	ND	ND	ND	42.9	52.3	12.1	92.5	64.6	13.6	ND	ND	ND
24	ND	ND	ND	ND	ND	ND	ND	ND	ND	56.5	32.1	3.1	81.2	52.3	9.8	ND	ND	ND
27	ND	ND	ND	ND	ND	ND	ND	ND	ND	49.6	30.5	ND	64.3	35.6	ND	ND	ND	ND
30	ND	ND	ND	ND	ND	ND	ND	ND	ND	14.2	ND	ND	43.3	18.4	ND	ND	ND	ND

*DMC = Demethoxy curcumin; BDMC = Bis-demethoxy curcumin; ND = Not detected

Fig 27: Table 20(b): Mean blood concentration of curcumin, demethoxy curcumin and bisdemethoxy curcumin in healthy human subjects

Time (hours)	Mean blood concentration of curcuminoids (ng/gm of blood)																	
	Regular turmeric extract (Example 1)			Curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone in 10:1 ratio (Example 3)			Curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone in 12:1 ratio (Example 4)			Sustained release formulation of curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone in 10:1 ratio coated with ethyl cellulose in 500:25ratio (Example 8)			Sustained release formulation of curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone in 12:1 ratio coated with ethyl cellulose in 500:25ratio (Example 9)			Sustained release formulation of Regular turmeric extract coated with ethyl cellulose in 500:25 ratio (Example 10)		
	Curcumin	DMC	BD MC	Curcumin	DMC	BD MC	Curcumin	DMC	BD MC	Curcumin	DMC	BD MC	Curcumin	DMC	BDMC	Curcumin	DMC	BD MC
0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1	8.2	ND	ND	11.2	ND	ND	22.3	ND	ND	62.8	44.4	13.4	72.4	60.5	16.2	12.8	ND	ND
2	14.5	ND	ND	26.2	ND	ND	81.3	ND	ND	99.1	66.2	15.6	110.2	83.3	19.3	21.1	ND	ND
4	10.2	ND	ND	80.3	ND	ND	102.1	ND	ND	138.1	90.8	13.4	158.5	108.1	18.2	14.2	ND	ND
6	3.2	ND	ND	14.1	ND	ND	26.2	ND	ND	82.1	56.4	14.6	125.1	101.4	17.1	6.2	ND	ND
8	ND	ND	ND	7.1	ND	ND	11.5	ND	ND	83.3	66.6	9.8	92.6	78.5	15.6	ND	ND	ND
12	ND	ND	ND	ND	ND	ND	ND	ND	ND	48.4	39.3	9.8	88.4	62.6	12.9	ND	ND	ND
24	ND	ND	ND	ND	ND	ND	ND	ND	ND	67.4	47.2	3.4	71.4	54.7	9.4	ND	ND	ND
27	ND	ND	ND	ND	ND	ND	ND	ND	ND	37.3	31.2	ND	60.3	33.6	ND	ND	ND	ND
30	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.6	ND	ND	39.4	20.4	ND	ND	ND	ND

*DMC=Demethoxycurcumin;BDMC=Bis-demethoxycurcumin;ND=Notdetected

Fig 28: Table 21(a): Mean blood concentration of curcumin, demethoxy curcumin and bisdemethoxy curcumin in healthy human subjects

Time (hours)	Mean blood concentration of curcuminoids (ng/gm of blood)																	
	Regular turmeric extract (Example 1)			Curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone in 10:1 ratio (Example 3)			Curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone in 12:1 ratio (Example 4)			Sustained release formulation of Curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone in 10:1 ratio coated with shellac in 10:1 ratio (Example 17)			Sustained release formulation of Curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone in 12:1 ratio coated with shellac in 10:1 ratio (Example 18)			Sustained release formulation of regular turmeric extract coated with shellac in 10:1 ratio (Example 20)		
	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC
0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1	7.5	ND	ND	13.5	ND	ND	18.9	ND	ND	58.7	40.1	12.4	75.4	52.3	16.7	8.5	ND	ND
2	13.1	ND	ND	28.4	ND	ND	78.4	ND	ND	95.4	67.4	15.2	101.4	82.1	18.4	15.4	ND	ND
4	9.4	ND	ND	89.6	ND	ND	110.2	ND	ND	142.1	95.9	14.2	169.8	106.7	17.1	10.2	ND	ND
6	ND	ND	ND	18.6	ND	ND	28.7	ND	ND	88.7	79.6	13.7	119.3	93.4	15.8	ND	ND	ND
8	ND	ND	ND	9.5	ND	ND	10.4	ND	ND	69.4	55.4	10.2	101.5	75.8	14.7	ND	ND	ND
12	ND	ND	ND	ND	ND	ND	ND	ND	ND	50.4	32.3	9.5	88.6	61.8	13.1	ND	ND	ND
24	ND	ND	ND	ND	ND	ND	ND	ND	ND	41.2	25.4	3.1	74.2	49.6	8.4	ND	ND	ND
27	ND	ND	ND	ND	ND	ND	ND	ND	ND	32.4	12.3	ND	60.1	31.2	ND	ND	ND	ND
30	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.4	ND	ND	39.4	19.4	ND	ND	ND	ND

*DMC = Demethoxy curcumin; BDMC = Bis-demethoxy curcumin; ND = Not detected

Fig 29: Table 21(b): Mean blood concentration of curcumin, demethoxy curcumin and bisdemethoxy curcumin in healthy human subjects

Time (hours)	Mean blood concentration of curcuminoids (ng/gm of blood)																	
	Regular turmeric extract (Example 1)			Curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone in 10:1 ratio (Example 3)			Curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone in 12:1 ratio (Example 4)			Sustained release formulation of Curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone in 10:1 ratio coated with shellac in 14:1 ratio (Example 15)			Sustained release formulation of Curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone in 12:1 ratio coated with shellac in 14:1 ratio (Example 16)			Sustained release formulation of regular turmeric extract coated with shellac in 14:1 ratio (Example 19)		
	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC
0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1	7.5	ND	ND	13.5	ND	ND	18.9	ND	ND	55.1	36.8	11.2	68.5	49.5	14.8	8.6	ND	ND
2	13.1	ND	ND	28.4	ND	ND	78.4	ND	ND	88.4	63.4	13.5	100.4	78.9	16.4	14.2	ND	ND
4	9.4	ND	ND	89.6	ND	ND	110.2	ND	ND	132.4	89.3	15.2	159.4	99.8	17.6	8.6	ND	ND
6	ND	ND	ND	18.6	ND	ND	28.7	ND	ND	74.3	71.2	12.4	115.4	81.4	15.1	ND	ND	ND
8	ND	ND	ND	9.5	ND	ND	10.4	ND	ND	61.3	52.1	9.4	98.6	69.3	13.9	ND	ND	ND
12	ND	ND	ND	ND	ND	ND	ND	ND	ND	52.3	35.4	8.5	80.2	54.2	12.4	ND	ND	ND
24	ND	ND	ND	ND	ND	ND	ND	ND	ND	40.2	23.2	2.2	69.3	40.8	7.4	ND	ND	ND
27	ND	ND	ND	ND	ND	ND	ND	ND	ND	29.6	8.5	ND	52.1	25.3	ND	ND	ND	ND
30	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.1	ND	ND	35.2	17.6	ND	ND	ND	ND

*DMC = Demethoxy curcumin; BDMC = Bis-demethoxy curcumin; ND = Not detected

Fig 30: Table22: Cross over pattern of subjects treated with study drug

	Initial dose	1 st cross over After two weeks	2 nd cross over After four weeks	3 rd cross over After six weeks	4 th cross over After eight weeks	5 th cross over After ten weeks	6 th cross over After twelve weeks
Group 1 (R 101 to 104)	Study drug I	Study drug II	Study drug III	Study drug IV	Study drug V	Study drug VI	Study drug VII
Group 2 (R 105 to 108)	Study drug II	Study drug III	Study drug IV	Study drug V	Study drug VI	Study drug VII	Study drug I
Group 3 (R 109 to 112)	Study drug III	Study drug IV	Study drug V	Study drug VI	Study drug VII	Study drug I	Study drug II
Group 4 (R 113to 116)	Study drug IV	Study drug V	Study drug VI	Study drug VII	Study drug I	Study drug II	Study drug III
Group 5 (R 116to 120)	Study drug V	Study drug VI	Study drug VII	Study drug I	Study drug II	Study drug III	Study drug IV
Group 6 (R 121 to 124)	Study drug VI	Study drug VII	Study drug I	Study drug II	Study drug III	Study drug IV	Study drug V
Group 7 (R 125to 128)	Study drug VII	Study drug I	Study drug II	Study drug III	Study drug IV	Study drug V	Study drug VI

Fig 31: Table 23(a) Mean blood concentration, half life ($t_{1/2}$), and AUC of curcumin, demethoxy curcumin and bisdemethoxy curcumin in healthy human subjects

Mean blood concentration of curcuminoids (ng/gm of blood)															
Time(hours)	Regular turmeric extract (Example 1)			Sustained release formulation of curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone in 12:1 ratio coated with ethyl cellulose in 10:1 ratio (Example 6)			Sustained release formulation of regular turmeric extract coated with ethyl cellulose in 10:1 ratio (Example 7)			Curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone in 10:1 ratio (Example 3)			Curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone in 12:1 ratio (Example 4)		
	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC
0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
0.5	ND	ND	ND	40.9	25.6	10.2	ND	ND	ND	10.3	ND	ND	14.5	ND	ND
1	3.1	ND	ND	75.2	45.6	18.6	4.1	ND	ND	28.6	ND	ND	28.9	ND	ND
2	10.5	ND	ND	120.6	64.2	21.5	11.2	ND	ND	35.9	ND	ND	53.6	ND	ND
3	6.2	ND	ND	131.1	77.1	23.4	7.1	ND	ND	55.6	ND	ND	81.2	ND	ND
4	3.2	ND	ND	167.8	105.3	26.3	3.7	ND	ND	95.6	ND	ND	114.5	ND	ND
6	ND	ND	ND	130.2	85.2	17.4	ND	ND	ND	20.6	ND	ND	24.4	ND	ND
8	ND	ND	ND	102.5	70.3	15.1	ND	ND	ND	15.3	ND	ND	18.4	ND	ND
10	ND	ND	ND	91.2	62.4	13.2	ND	ND	ND	ND	ND	ND	ND	ND	ND
12	ND	ND	ND	81.5	55.7	11.4	ND	ND	ND	ND	ND	ND	ND	ND	ND
16	ND	ND	ND	73.4	47.3	9.8	ND	ND	ND	ND	ND	ND	ND	ND	ND
20	ND	ND	ND	60.7	39.6	7.9	ND	ND	ND	ND	ND	ND	ND	ND	ND
24	ND	ND	ND	52.6	29.6	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND
28	ND	ND	ND	40.4	15.4	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND
32	ND	ND	ND	25.6	10.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
36	ND	ND	ND	17.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
$t_{1/2}$ (hours)	1.04			7.5	6.9	5.97	1.06			4.6			4.9		
AUC(ng/g)	23.8			2508.2	1517.9	322.6	26.9			333.3			421.1		

*DMC = Demethoxy curcumin; BDMC = Bis-demethoxy curcumin; ND = Not detected

Fig 32: Table 23(b) Mean blood concentration, half life ($t_{1/2}$), and AUC of curcumin, demethoxy curcumin and bisdemethoxy curcumin in healthy human subjects

Time (hours)	Mean blood concentration of curcuminoids (ng/gm of blood)														
	Regular turmeric extract (Example 1)			Sustained release formulation of curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone in 12:1 ratio coated with shellac in 10:1 ratio (Example 18)			Sustained release formulation of regular turmeric extract coated with shellac in 10:1 ratio(Example 20)			Curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone in 10:1 ratio (Example 3)			Curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone in 12:1 ratio (Example 4)		
	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC	Curcumin	DMC	BD MC
0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
0.5	ND	ND	ND	35.6	25.3	12.8	ND	ND	ND	10.3	ND	ND	14.5	ND	ND
1	3.1	ND	ND	78.6	51.2	17.4	5.2	ND	ND	28.6	ND	ND	28.9	ND	ND
2	10.5	ND	ND	122.3	64.5	22.1	12.4	ND	ND	35.9	ND	ND	53.6	ND	ND
3	6.2	ND	ND	139.6	78.1	24.6	7.5	ND	ND	55.6	ND	ND	81.2	ND	ND
4	3.2	ND	ND	168.5	112.4	27.8	4	ND	ND	95.6	ND	ND	114.5	ND	ND
6	ND	ND	ND	132.4	95.3	17.8	ND	ND	ND	20.6	ND	ND	24.4	ND	ND
8	ND	ND	ND	105.4	74.6	15.4	ND	ND	ND	15.3	ND	ND	18.4	ND	ND
10	ND	ND	ND	90.2	61.5	13.9	ND	ND	ND	ND	ND	ND	ND	ND	ND
12	ND	ND	ND	85.6	50.2	10.4	ND	ND	ND	ND	ND	ND	ND	ND	ND
16	ND	ND	ND	78.6	45.7	9.5	ND	ND	ND	ND	ND	ND	ND	ND	ND
20	ND	ND	ND	65.8	39.6	7.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
24	ND	ND	ND	55.6	27.8	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND
28	ND	ND	ND	46.3	14.7	3	ND	ND	ND	ND	ND	ND	ND	ND	ND
32	ND	ND	ND	30.2	10.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
36	ND	ND	ND	21.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
t _{1/2} (hours)	1.04			8.2	7.4	5.89	1.1			4.6			4.9		
AUC(ng/gm)	23.8			2653.4	1560.7	330.8	29.8			333.3			421.1		

*DMC = Demethoxy curcumin; BDMC = Bis-demethoxy curcumin; ND = Not detected

Fig 33: Table 24: Mean blood concentration, half life ($t_{1/2}$), and AUC of curcumin, demethoxy curcumin and bisdemethoxy curcumin in healthy human subjects

Time (hours)	Mean blood concentration of curcuminoids (ng/gm of blood)														
	Regular turmeric extract (Example 1)			Sustained release formulation of curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone prepared as per example 21			Sustained release formulation of curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone prepared as per example 22			Curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone in 10:1 ratio (Example 3)			Curcuminoids blended with essential oil of turmeric having 45% Ar-turmerone in 12:1 ratio (Example 4)		
	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC	Curcumin	DMC	BDMC
0	ND	ND	ND	ND	ND	0	0	0	0	ND	ND	ND	ND	ND	ND
0.5	ND	ND	ND	19.8	15.2	10.2	17.3	13.6	11.3	11.2	ND	ND	13.7	ND	ND
1	2.5	ND	ND	42.5	38.6	28.6	39.6	30.2	24.6	24.7	ND	ND	30.5	ND	ND
2	11.2	ND	ND	75.6	62.3	39.6	70.2	55.6	34.7	39.8	ND	ND	48.5	ND	ND
3	6.1	ND	ND	115.3	100.8	46.8	110.9	92.3	39.8	60.5	ND	ND	84.9	ND	ND
4	3.2	ND	ND	145.8	123.5	53.8	131.2	114.9	50.9	90.2	ND	ND	115.1	ND	ND
6	ND	ND	ND	158.2	142.8	62.3	145.6	132.4	58.3	17.9	ND	ND	22.7	ND	ND
8	ND	ND	ND	186.4	162.3	55.8	169.6	142.3	51.3	13.2	ND	ND	16.9	ND	ND
10	ND	ND	ND	163.2	149.7	40.2	152.3	132.4	39.6	ND	ND	ND	ND	ND	ND
12	ND	ND	ND	145.6	130.4	35.6	140.4	116.8	31.2	ND	ND	ND	ND	ND	ND
16	ND	ND	ND	125.3	101.3	29.6	114.5	100.3	27.4	ND	ND	ND	ND	ND	ND
20	ND	ND	ND	115.9	89.6	23.5	101.3	82.1	20.3	ND	ND	ND	ND	ND	ND
24	ND	ND	ND	96.8	71.3	19.6	94.6	66.3	17.1	ND	ND	ND	ND	ND	ND
28	ND	ND	ND	88.7	59.6	17.5	89.6	52.1	15.9	ND	ND	ND	ND	ND	ND
32	ND	ND	ND	70.2	45.6	14.3	68.3	40.3	12.3	ND	ND	ND	ND	ND	ND
36	ND	ND	ND	55.6	35.4	10.9	53.6	30.5	9.1	ND	ND	ND	ND	ND	ND
$t_{1/2}$ (hours)	1.07			11.8	10.4	10.2	11.4	9.9	9.2	4.5			4.7		
AUC(ng/gm)	23.9			4002.5	3226.1	1056.8	3752.8	2939.7	957.1	321.9			414.9		