## Chemical Structures of FD&C Food Dyes

$$SO_3Na$$
 $SO_3Na$ 
 $SO_3Na$ 
 $SO_3Na$ 
 $SO_3Na$ 
 $SO_3Na$ 
 $SO_3Na$ 
 $SO_3Na$ 
 $SO_3Na$ 
 $SO_3Na$ 

Figure 1. FD&C Blue No. 1

$$NaO_3S$$
 $NaO_3S$ 
 $NaO_3Na$ 

Figure 2. FD&C Blue No. 2

$$\begin{array}{c} \text{SO}_3\text{Na} \\ \text{N}^+\text{(C}_2\text{H}_5\text{)CH}_2 \\ \\ \text{N}(\text{C}_2\text{H}_5\text{)CH}_2 \\ \\ \end{array}$$

Figure 3. FD&C Green No. 3

Figure 4. FD&C Red No. 3

$$NaO_3S$$
 $N=N$ 
 $N=N$ 
 $SO_3Na$ 

Figure 5. FD&C Red No. 40

$$NaO_3S \longrightarrow N \longrightarrow N \longrightarrow N$$

$$NaO_2C$$

$$NaO_3C$$

**Figure 6.** FD&C Yellow No. 5

Figure 7. FD&C Yellow No. 6