

## Chapter 12

### Web Text Box 2

#### Alternative names for components of the electron transport chain

The electron transport chain consists of four large protein complexes plus two mobile carriers: coenzyme Q and cytochrome *c*. The protein complexes are usually given Roman numerals (I, II, III, IV) but may also be named in terms of their enzyme activities or their cytochrome components (see Textbox 11.3, A Cytochrome ABC). To add further complexity coenzyme Q is also called ubiquinone so, for example, NADH:coenzyme Q oxidoreductase is also called NADH:ubiquinone oxidoreductase. To help readers puzzle out publications on the subject we list below the frequently used alternative names for the complexes (but remember that wherever “coenzyme Q” appears you could create another synonym by using “ubiquinone”!):

Complex I    NADH:Coenzyme Q oxidoreductase  
                  NADH dehydrogenase

Complex II    succinate:Coenzyme Q oxidoreductase  
                  succinate dehydrogenase

Complex III    coenzyme Q:cytochrome *c* oxidoreductase  
                  cytochrome *c* reductase  
                  cytochrome *bc*<sub>1</sub> complex

Complex IV    cytochrome *c* oxidase  
                  cytochrome *a/a*<sub>3</sub>

Finally ATP synthase (book p200) is sometimes called complex V.