Periodic Table of Elements

For elements with no stable isotopes, the mass number of the isotope with the longest half-life is in parentheses.
NERVE ACTION POTENTIAL
The Neuromuscular Junction

1. Action potential
2. Vesicle of acetylcholine
3. Voltage-gated Na+ channel
4. Plasma membrane of muscle fiber
5. Acetylcholine receptor site
6. Acetylcholinesterase
7. Motor end plate
8. Neurotransmitter-gated channel
9. Voltage-gated calcium channel
10. Muscle fiber
11. Terminal button
12. Axon terminal
13. Axon of motor neuron
14. Myelin sheath
The chemical compound \textbf{acetylcholine} (often abbreviated \textbf{ACh}) is a neurotransmitter.

Choline and its metabolites are needed for three main physiological purposes: structural integrity and signaling roles for cell membranes, cholinergic neurotransmission (\textit{acetylcholine synthesis}), and a major source for methyl groups via its metabolite, \textit{trimethylglycine} (betaine) that participates in the \textit{S-adenosylmethionine} synthesis pathways.

\textbf{Acetate} is a derivative of \textbf{acetic acid}. The acetate anion, \([\text{CH}_3\text{COO}]^-\), is one of the \textit{carboxylate} family. It is the conjugate base of \textbf{acetic acid}. Above pH of 5.5, acetic acid converts to acetate.\[^{[c]}\]

\textbf{Acetylcholinesterase}, also known as \textbf{AChE}, is an enzyme that degrades (through its hydrolytic activity) the neurotransmitter \textbf{acetylcholine}, producing \textbf{choline} and an \textbf{acetate}.\[^{[d]}\]
Acetic acid, CH₃COOH is an organic acid that gives vinegar its sour taste and pungent smell in the food industry. Acetic acid is used under the food additive code E260 as an acidity regulator and as a condiment. Vinegar is commonly used in food preparation, particularly in picking processes, vinaigrettes, and other salad dressings. It is an ingredient in sauces such as mustard, ketchup, and mayonnaise. Vinegar is sometimes used while making chutneys. It is often used as a condiment. Marinades often contain vinegar.

- Condiment for beetroot — cold, cooked beetroot is commonly eaten with vinegar
- Condiment for fish and chips — People commonly use malt vinegar (or non-brewed condiment) on chips.
- Flavoring for potato chips — many American, Canadian and British manufacturers of packaged potato chips and crisps feature a variety flavored with vinegar and salt.
- Vinegar pie — a North American dessert made with a vinegar to one’s taste and similar to chess pie. [citation needed]
- Pickling — any vinegar can be used to pickle foods.
- Cider vinegar and sauces — cider vinegar usually is not suitable for use in delicate sauces. *Apple cider vinegar - Usually placed on the table in small bowls or cups so that people can dip their crab meat into it. Also mixed with water and used to steam crabs.[121]
- Substitute for fresh lemon juice — cider vinegar can usually be substituted for fresh lemon juice in recipes and obtain a pleasing effect although it lacks the vitamin C.
- Saucing roast lamb — pouring cider vinegar over the meat when roasting lamb, especially when combined with honey or when sliced onions have been added to the roasting pan, produces a sauce.
- Sweetened vinegar is used in the dish of pork knuckles and ginger stew which is made among Chinese people of Cantonese backgrounds to celebrate the arrival of a new child.[23]
- Sushi rice — Japanese use rice vinegar as an essential ingredient for sushi rice.
- Red vinegar — Sometimes used in Chinese soups.
- Flavoring — used in the Southern U.S. to flavor collard greens, green beans, black-eyed peas, or cabbage to taste.
- Commonly put into mint sauce, for general palate preference.
- Vinegar — especially the coconut, cane, or palm variety — is one of the principal ingredients of Philippine.
- White vinegar can be used as flavoring in ham and beans