

p. 38 change H to read: The selection, use and care of the tools and other equipment employed in the provision of midwifery care. Reletter everything after new item H sequentially: i.e old H becomes J, etc.

p. 41 under Professional, legal and other aspects, change C to read: The principles and practice of data collection as relevant to midwifery practice.

P. 42-43 revised MANA standards, as follows (numerous changes make it easier just to give you the entire revised document)::

**MANA Standards and Qualifications for the Art and Practice
of
Midwifery**, *revised January, 1997*

The midwife recognizes that childbearing is a woman's experience and encourages the active involvement of family members in her care.

1. Skills: Necessary skills of a practicing midwife include the ability to:

- * Provide continuity of care for the woman and her family during the maternity cycle,
 - * Assess and provide care for healthy women during pregnancy, birth and the postpartum period and for newborns during the first six weeks of life;
 - * Identify and assess deviations from normal;
 - * Maintain proficiency in life-saving measures by regular review and practice; and
 - * Deal with emergency situations appropriately.
- * In addition, a midwife may choose to provide well-woman care.

It is affirmed that judgement and intuition play a role in competent assessment and response.

2. Appropriate equipment: Midwives are equipped to assess maternal, fetal newborn well-being; to maintain a clean and/or aseptic technique; to treat maternal hemorrhage; and to resuscitate mother or infant.

3. Records: Midwives keep accurate records of care provided for each woman such as are acceptable in current midwifery practice. Records shall be held confidential and provided to the woman on request.

4. Data collection: Midwives collect data for their practice on a regular basis. It is highly recommended that this be done prospectively, following the guidelines and using the data form developed by the MANA Statistics and Research Committee.

5. Compliance: Midwives will inform and assist parents regarding the Public Health requirements of the jurisdiction in which the midwifery practice will occur.

6. Medical consultation and referral: All midwives recognize that there are certain conditions when medical consultations are advisable. The midwife shall make a reasonable attempt to assure that her client has access to consultation and/or referral to a medical care system when indicated.

7. Screening: Midwives respect the woman's right to self-determination within the boundaries of responsible care. Midwives continually assess each woman regarding her health and well-being relevant to the appropriateness of midwifery services. Women will be informed of this assessment. It is the right and responsibility of the midwife to refuse or discontinue services in certain circumstances. Appropriate referrals are made in the interest of the mother or baby's well-being or when the required or requested care is outside the midwife's legal or personal scope of practice as described in her protocols.

8. Informed choice: Each midwife will present accurate information about herself and her services, including but not limited to:

- * Her education in midwifery
- * Her experience level in midwifery
- * Her protocols and standards
- * Her financial charges for services
- * The services she does and does not provide
- * The responsibilities of the pregnant woman and her family

9. Continuing education: Midwives will update their knowledge and skills on a regular basis.

10. Peer review: Midwifery practice includes an on-going process of case review with peers.

11. Protocols: Each midwife will develop protocols for her services that are in agreement with the basic philosophy of MANA and in keeping with her level of understanding. Each midwife is encouraged to put her protocols in writing.

References:

American College of Nurse-Midwives documents

ICM membership and joint study on maternity, FIGO, WHO, etc. revised 1972

New Mexico regulations for the practice of lay midwifery, revised 1982

North West Coalition of Midwives Standards for Safety and Competency in Midwifery

Varney, Helen, Nurse-Midwifery, Blackwell Scientific Pub., Boston, MA 1980

p. 61 under Homeopathic pharmacies, note the following changes of address:
Hahnemann Medical Pharmacy, 828 San Pablo Ave., Albany, CA 94706,
(510) 527-3003

Luyties Pharmacerutical Co. (314) 533-4600

Standard Homeopathic Co., 154 W 131st, Los Angeles, CA 90061, (800)
624-9659

Apothecary Products, Inc. 11531 Pupp Dr., Burnsville, MN 55337

p. 64 note the following change of address:

NF Formulas, 9775 WE Commerce Circle, Suite C-5, Wilsonville, OR
94102, in Oregon dial (800) 325-9326, in all other states call (800) 547-4891

p. 82 in last paragraph, after the first sentence, add In practical terms, about 45 to 75% of adult body weight is made up of water. In chart at bottom of page, first column, the chemical abbreviation for calcium should be changed from C to Ca. Change Chlorine to Chloride (Cl).

p. 83 in chart under sodium, it should read “Combined with chloride . . .”

P. 83-87. The copy starting with Atoms and Molecules and going to the end of the chapter on page 88 has been extensively revised, as follows (the illustration on page 83 remains the same):

Atoms and molecules: Elements are pure substances that cannot be decomposed into simpler substances. Atoms are the smallest units of

elements that enter into chemical reactions. An element is therefore a quantity of atoms which are all alike. Atoms consist of two basic parts, the **nucleus** and the **electrons**.

The centrally located nucleus contributes most of an atom's weight and contains positively charged particles called **protons** (p^+) and may contain uncharged or neutral particles called **neutrons** (n^0). Together they are referred to as the **nucleus**. Because of the presence of the protons, the nucleus itself has a positive charge. It is the number of protons that distinguishes one type of atom from another. **Electrons** (e^-) are negatively charged particles that orbit the nucleus in unfixed three-dimensional variously shaped clouds called **orbitals**. This path is irregular and may occur anywhere in the cloud. This is called its **path of probability**, because there is no guarantee it will be found in this area, but there is a good chance it will be. In nature, most atoms exist in a charged state. If there are more protons than electrons, that atom has a net positive charge and is called a **cation**. Other atoms have a net negative charge; that is, they have more electrons than protons, and are called **anions**.

Molecules are groups of atoms bonded together. Molecules are made of the same type of atom (oxygen O_2). A compound contains two or more different types of atoms. An example is water H_2O , consisting of two atoms of hydrogen and one atom of oxygen. Molecules and compounds can have a positive or negative charge. For example, phosphate molecules have a negative charge (PO_4^-).

Chemical processes: When atoms combine with or break apart from other atoms, a **chemical reaction** occurs, which produces new products with different properties. These reactions are the foundation of all life processes on the physical plane.

The atoms in molecules and compounds are held together by forces of attraction called **chemical bonds**, which can be either ionic or covalent. Chemical reactions are the making or breaking of bonds between molecules.

Molecules and compounds are formed when atoms are able to take on or give up additional electrons and therefore combine to balance their electrons. Atoms which give up electrons are called **electron donors**. Those which tend to pick up electrons are called **electron acceptors**. Ionic bonding results from the electrostatic interaction between ions. When a positively charged atom and a negatively charged atom are attracted to each other, an **ionic bond** is formed.

A **covalent bond** occurs when neither of the combining atoms loses or gains an electron; instead they share one, two or three electron pairs. Two

atoms of the same type may form a covalent bond. Covalent bonds are far more common in organisms than ionic bonds and are far more strong and stable.

A **hydrogen bond** consists of a hydrogen atom covalently bonded to one oxygen atom or one nitrogen atom, but attracted to another oxygen or nitrogen atom. This weak bond can serve as a bridge between or within molecules, but does not form a molecule by itself because of the weakness of the bond. A few elements already have the maximum number of electrons in their outermost energy level and therefore do not naturally seek to combine with other elements. These are called **inert elements** or **noble gases**; an example is helium.

Elemental atoms of the same type may have differing numbers of neutrons in their nucleus giving them different nuclear masses. Due to this variation, the atomic weight for a given element is only an average. Atoms of a given element with differing numbers of neutrons are called **isotopes**.

Radioisotopes are isotopes that are unstable because they continuously undergo alteration of their nuclear structure as they try to form a more stable configuration. This nuclear "decay" process causes the atoms to emit radiation. Radioisotopes are used in several medical tests, where their path is followed through the body by detecting their radiation emission.

Most of the chemicals in the body exist in the form of compounds. **Inorganic compounds** are small, ionically bonded molecules that lack carbon. Some are vital to bodily function; they include water, many of the salts, as well as acids and bases. **Organic compounds** are molecules which contain carbon.

Energy: Chemical reactions produce **energy**, which is the capacity to do work. **Potential energy** is inactive or stored, and **kinetic energy** is the energy of motion. Energy exists in several different forms:

Chemical energy is released or absorbed in the breakdown or formation of chemical bonds. This energy is utilized when we metabolize food.

Mechanical energy is that which is directly involved in movement.

Radiant energy, such as heat and light, travels in waves. Some heat is released during breakdown processes in the body; this helps maintain body temperature.

Electrical energy is the result of the flow of charges, electrons or charged atoms called ions. It is essential for the conduction of nerve impulses. Our muscles will not work without the electrical impulses from the attached nerves.

Energy can be transformed from one form into another.

Acids, bases and salts: Bodily fluids are mostly water and must maintain a fairly constant balance of acids and bases to sustain life. A solution is acidic when it contains a large amount of the hydronium (H^+) ion, a proton. An acid compound, such as hydrochloric acid (HCl), will tend to give up H^+ ions. A solution is defined as basic or alkaline if it contains high concentrations of the hydroxyl (OH^-) ion. A basic compound, sodium hydroxide (NaOH) will tend to give up OH^- ions. A salt is a compound that contains a cation other than H^+ and an anion other than OH^- . Acids and bases combine with one another to form salts.

When molecules of inorganic compounds such as acids, bases, or salts are dissolved in water, they undergo **ionization (i-on-i-ZA-shun)**; that is, they break apart into ions. Such atoms are called **electrolytes (e-LECK-trow-lites)** because they will conduct an electric current. Electrolytes in the body consist of essential minerals which help maintain normal fluid balance, conduct electrical impulses in the nerves and muscles, and make up the skeletal system among many other functions. Serum electrolytes consist of ions dissolved in the blood that are responsible for maintaining pH in the body.

What is pH? The term **pH (potential of hydrogen)** is used to describe the degree of acidity or alkalinity (basicity) of a solution. pH is discussed by using a scale of 1 to 14, with 1 being the most acidic and 14 being most alkaline; 7.0, the midpoint of the scale, is neutral; that is, it is neither acid nor alkaline. A solution becomes more acidic as its hydrogen ion concentration rises. A pH of 5.0 is more acid (i.e., less alkaline) than one of 6.0. The difference between the two figures is negative and logarithmic; each number is a multiple of -10. Each value represents an enormous difference in hydrogen concentration. A pH of 7.20 is a 40% increase of hydrogen compared to 7.35. Each whole pH number represents a tenfold change from the previous value. The range of blood pH compatible with life is 6.8 to 7.8. When an organism's delicate acid/base ratio is altered, an excessively acid or alkaline state results.

pH Range:

ACID			9					BASE/ALKALINE					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Neutral													
----->-----> increasing base/alkaline concentration----->----->													
<-----<-----increasing hydrogen ion/acid concentration-----<-----<													

Biochemical reactions (reactions that occur in living systems) are very sensitive to small changes in the pH balance. A **buffer system** is a reserve of molecules which are utilized as needed to help resist large swings in pH; its essential function is to react with strong acids or bases in the body and replace them with weak acids or bases that will change the pH values only slightly. Carbonic acid and bicarbonate are both produced by the body and are important buffers involved in the maintenance of normal blood pH.

Organic compounds: Organic compounds always contain carbon and hydrogen. Carbon is a unique life-supporting element. Because it has four electrons in its outer shell, it can combine with a variety of other atoms, including other carbon atoms, to form straight chains, or branched chains and ring-shaped molecules. Organic compounds, held together almost entirely by covalent bonds, include carbohydrates, fats, proteins, nucleic acids (DNA and RNA) and adenosine triphosphate (ATP).

Carbohydrates are a large group of organic compounds known as **sugars** and **starches**. Their principal function is to provide the most readily available source of energy to sustain life. They are mainly composed of carbon, hydrogen and oxygen. There are three basic types of carbohydrates:

Monosaccharides (mon-oh-SACK-ah-rides) are simple sugars containing three to seven carbon atoms. Glucose and fructose are in this category. Although they have the same types of atoms, they are arranged differently, resulting in two different sugars.

Disaccharides (die-SACK-ah-rides) consist of two monosaccharides which are chemically joined. This combining process results in the loss of a water molecule and is called **dehydration synthesis**. Sucrose, or white table sugar, is an example of this carbohydrate; it is a combination of fructose and glucose. Disaccharides can be broken down into small molecules by adding water; this is called **digestion**.

Polysaccharides (pol-e-SACK-ah-rides) are long chains of mono-saccharides joined together through dehydration synthesis; they lack the sweetness of sugars. One of the main polysaccharides is glycogen.

Lipids, or fats, are composed of carbon, hydrogen and oxygen. Among these are fats, phospholipids (lipids that contain phosphorus), steroids, carotenes, vitamins E and K and prostaglandins. A fat molecule (triglyceride) consists of one molecule of glycerol and three of fatty acids. Lipids form via a dehydration process as water is lost. Fats represent the body's most highly concentrated source of energy, but are 10 to 12% less efficient as body fuels than are carbohydrates. There are several varieties of fats:

A **saturated fat** contains no double bonds between any of its carbon atoms, and all the carbon atoms are bonded to the maximum number of hydrogen atoms; thus this fat is saturated with hydrogen atoms. Most of these are animal fats which remain solid at room temperature.

Unsaturated fat contains one or more double covalent bonds between its carbon atoms and is not completely saturated with hydrogen atoms. Examples are olive and peanut oil which remain liquid at room temperature.

Polyunsaturated fats contain two or more double covalent bonds between their carbon atoms. Corn, safflower and sunflower oils are examples of polyunsaturated fats.

Prostaglandins (pros-tah-GLAN-dens) are a large group of membrane-associated fats composed of 20 carbon fatty acids containing five carbon atoms joined to form a ring. They are called local hormones because they are produced by cells in certain localized areas of the body (such as the uterine musculature) and influence the functioning of their neighbor cells. Although synthesized in minute amounts, they simulate hormones and are involved in the regulation of many hormonal responses.

Proteins are complex structures responsible for many bodily activities. Proteins in the form of enzymes speed up many essential biochemical reactions. Antibodies are proteins that provide defenses against disease conditions. Chemically, proteins always contain carbon, hydrogen, nitrogen and oxygen. Many also contain sulfur and phosphorus. **Amino acids** are the building blocks of proteins. The bonds between amino acids

are called peptide bonds. Amino acids combine to form more complex molecules, called polypeptides, while water molecules are lost through dehydration synthesis. At least 20 different amino acids are found in proteins. Specific combinations of some of these amino acids produce different types of proteins.

Nucleic (new-CLAY-ick) acids are large organic molecules containing carbon, hydrogen, oxygen, nitrogen and phosphorus. The basic units of nucleic acids are **nucleotides**. Each of these contains three basic parts:

1. A nitrogen base; these are ring-shaped structures containing carbon, hydrogen, oxygen and nitrogen. They can be one of five possible nitrogen bases: the double-ringed structures of adenine and thymine (called purines) or the single ringed structures of cytosine, guanine and uracil (called pyrimidines).
2. A pentose sugar (either deoxyribose or ribose)
3. A phosphate group

Deoxyribonucleic (dee-ox-see-rye-bow-new-KLAY-ick) acid (DNA) is a molecule consisting of two strands of chemicals with crossbars (a ladder), which twist about each other to form a spiral staircase shape. The uprights of the ladder consist of alternating phosphate groups and deoxyribose portions of the nucleotides. The rungs of the ladder have two halves which consist of paired nitrogen bases. Adenine always pairs with thymine, and cytosine always pairs with guanine. **Genes** are segments of DNA molecules. They determine our inherited traits and control bodily activities throughout our lifetime. When a cell divides, its hereditary information is passed on to the next generation of cells via the genes.

Ribonucleic acid (RNA) is single stranded and its sugar is ribose. It does not contain thymine, but does contain the nitrogen base uracil. RNA has a specific role to perform with DNA in protein synthesis reactions.

Adenosine (a-DEN-oh-sin) triphosphate (try-FOSS-fate) (ATP) is essential to the life of the cell, because it stores energy for various cellular activities. It consists of the phosphate groups adenine and the ribose sugar. When its energy is released, another type of molecule, **adenosine diphosphate (ADP)**, is formed. ADP can be converted back to ATP using the energy supplied by various breakdown reactions, especially that of glucose.

Cyclic adenosine-3',5'-monophosphate (cyclic AMP) is a molecule of adenosine monophosphate with the phosphate attached to the ribose sugar at two places. It functions in certain hormonal reactions.

P. 90 change Facilitated diffusion to Facilitated transport.

Osmosis now reads as follows: **Osmosis** is the movement of pure water molecules through a selectively permeable membrane, such as a blood vessel, from an area of higher particle concentration to an area of lower particle concentration. (Particles include salt and serum albumins.) The more dissolved solids the solution contains, the greater the movement of water into the solution from an area containing fewer solids. Osmosis is an important force in the movement of water between various parts of the body and is key to understanding why sufficient salt and protein maintain a pregnant woman's circulating blood volume.

P. 92 the first paragraph below the chart now reads: **Inclusion bodies** are stored substances in the cytoplasm. They include **melanin**, the pigment in skin, hair and eyes that screens out ultraviolet rays; **glycogen** (stored glucose) and **lipids** (stored in fat cells) both of which can be broken down for energy, and **mucus** which provides lubrication and protection.

The first paragraph of Cellular reproduction now reads: The above structures contribute to cell maintenance on a daily basis. However, cells may become damaged, diseased or worn out and then die; but most cells have a programmed lifespan. **Cell division** is the process by which cells reproduce themselves. It consists of the division of the nucleus and the cytoplasm, a process known as **mytosis**.

P. 94, the numbered items at the top of the page should be 6 and 7 (not 5 and 6).

P. 140 the two sentences beginning in the second line below the illustration of the heart should read: The **tricuspid valve** connects the right atrium to the right ventricle; blood exits the right side of the heart through the **pulmonary valve**. The **mitral valve** connects the left atrium to the left ventricle; blood exits the left side of the heart through the **aortic valve**.

P. 166 The last paragraph now reads: **The mucosa of the yoni:** The 1 cm-deep soft, vascular lining of the yoni. It is loosely attached to underlying structures and contains secretory tissue; there are no glands that produce

yoni discharge. The pH of secretions vary with ovarian activity and average 4.0 in adults; pH is lowest midcycle and highest premenstrually.

P. 170 six lines from the bottom of the page, change identical to fraternal twins.

P. 172 the captions for the illustrations of uterine positioning, from left to right, should read: antiverted, antiflexed, retroverted, retroflexed, midline.

P. 224 the last sentence in the last paragraph under Calcium has been deleted and replaced with: The most assimilable form is calcium citrate maleate, although the citrate and carbonate forms work well for some women. It can be taken together with magnesium in a citrate, tartrate, asparatate or glycinate form (which is the only one that doesn't cause loose stools).

P. 234 below the paragraph entitled Correcting the damage done by low-salt diets, the following paragraph has been added and the first part of Working with Food lists now appears in p. 235.:

Determining if a woman is hypertensive due to chloride -sensitivity: If you or a client is concerned that her hypertensive tendencies may be related to sensitivity to the chloride in table salt, the test described above can also be used to detect whether this is so. Have the woman mix ½ to 1 Tbsp. of table salt in one liter of mineral water and drink it within a short time. Any rise in blood pressure three to four hours afterwards is probably due to chloride sensitivity. If so, the blood pressure should fall again following six hours of no additional intake of table salt. While I do not recommend going in a low salt diet per se, the woman can try avoiding adding salt to her foods at the table and get the extra sodium she needs from natural sources. Sea weeds, seafoods, celery and dairy products are all good sources of natural sodium. (Kuse, Midwifery Today Conf workshop, 1997)

p. 247 in the chart, under Category one, grams column, it should read ≤ 2500 .

P. 253 the last paragraph on Nutrasweet, now reads as follows:

Nutrasweet (aspartame) is a chemical sugar substitute which is found in many foods. It has three ingredients: phenylalanine, aspartic acid, and methanol. Phenylalanine is the amino acid which phenylketonurics cannot metabolize. If the fetus is phenylketonuric, concentrated ingestion of asparatame by the mother may cause brain damage even before birth. There is a larger segment of the population which is sensitive to high levels of phenylalanine. Methanol is a human-specific, highly toxic poison which is

converted in the body to formaldehyde and formic acid, both of which have toxic effects on the thymus gland. Toxic side effects include malaise, nausea, recurrent headaches, dizziness, and visual disturbances and symptoms that mimic lupus and multiple sclerosis. It is best to avoid aspartame completely, and this is especially true during pregnancy. (Balch, 1990) (For more details also see the chapter entitled Inborn Errors of Metabolism in Pregnancy in Diagnostic Tests.)

P. 336 in the center of the page, the address for the Hendricks Institute has changed to 401 East Carrillo, Santa Barbara, CA 93101 (800) 688-0772.

P. 401 first paragraph, third line changed to read (550 to 1,650 ml.).

P. 404 last line on page deleted, as it is a duplicate of the first line on page 405.

P. 408, second footnote under chart, **, second line, should read 10 weeks gestation).

P. 413 under Rate of fundal growth from visit to visit, the following sentence is now added to the end of the paragraph: Keep in mind that fundal growth does not always reflect fetal growth; therefore palpate the baby's size as well and compare your findings.

P. 421 the second paragraph has been changed to read:

The normal, healthy person's blood pressure changes constantly with activity, rest, and anxiety levels. For instance, laughing or talking can elevate the diastolic pressure as much as ten points. In pregnancy, there is generally a drop in blood pressure in the second trimester followed by a rise in the third. This fluctuation is related to normal blood volume expansion and is entirely physiological. In a well nourished woman, the blood pressure may vary a great deal and not reflect any increased risk to mother or baby.

The next paragraph now reads **Proper positioning and other considerations:** It is best to avoid coffee and smoking at least 30 minutes prior to taking a reading. Have the woman rest quietly at least 5 minutes before you start. Note that tight clothing above the cuff or crossed legs may falsely elevate the reading. The blood pressure should be taken with the person sitting quietly with their back supported and their arm supported at heart level, palm up. If the arm is hanging to the side, the reading could be

artificially elevated as much as 8 mmHg. If no resting surface is available, position yourself so that you can support their arm with your arm or leg. Both feet should rest comfortably on the floor. If the woman is lying supine, it is best to place her on her side (left is best) so you do not encourage supine hypotension (the artificial lowering of blood pressure from the uterus pressing into the large vessels in her back). Her arm should rest flat, parallel with her body. Note on the chart how the woman is positioned (this will only be necessary if she is positioned differently than is usual for your practice.)

P. 430, last line above Examining the ear now reads (See chapter on Eye Problems in Problems That Can Occur at Any Time for details.)

P. 441 from left to right, the illustration should be captioned: Boundaries of the breast, Clockwise method, Radial method, Transverse method.

P. 462 the second full paragraph now reads: The **pelvic inlet**, which is defined by the pelvic brim, is the bony entry of the birth passage. Below this plane is the **pelvic cavity**, which forms a curved passage between the inlet and the outlet. The anterior wall of this passage is formed by the inner surface of the pubic bone, which is straight and shallow. The posterior wall is formed by the inner surface of the sacrum and coccyx which is deep and concave. The inner surface of the ischium and part of the body of the ilium are found on either side. The **pelvic outlet** is diamond-shaped and is bounded by the lower border of the pubic bone in front, the ischial tuberosities on either side and by the tip of the sacrum in back.

P. 465 in the chart, under pelvic features, 11 items down the column now reads Splay of side walls.

P. 503 the first few sentence in **Dealing with latecomers** now reads: Latecomers can be of three varieties. Some have just moved to your area, come bearing prenatal records and make wonderful clients. In other cases, they live nearby, have been desperately looking for you for most of their pregnancies, finally found you and prove to be very committed to homebirth, or they are fence-sitters who say they have been looking for you, but when they finally find you, after wasting your time and theirs doing a crash initial, chicken out.

P. 583 HIV section new reads: **HIV testing:** The notion that the HIV virus causes AIDS has gone largely unchallenged since this hypothesis was introduced in the 1980s. The symptoms of AIDS and those of syphilis are identical in every respect. Internationally, there are some highly respected researchers who believe there is a link between AIDS and syphilis infection. Other correlations with the development of AIDS include heavy drug use and even the toxic therapies recommended for treating HIV.

What the HIV virus might be or whether it can cause illness are topics of debate among a growing number of researchers. Counsel everyone regarding their risk factors for HIV and syphilis exposure (which are identical). Explain to them that there is a growing scientific controversy regarding exactly what HIV is, whether it is a problem, and what HIV antibody titers mean. Anyone who is HIV positive should review these issues carefully, and consider having laboratory work evaluated for a possible hidden syphilis infection through the BASIS Project, 2811 Martin Luther King Jr. Way, Berkeley CA, 94703 (510) 548-4000. (McKenna, 1993) This is a private research project set up to investigate unusual forms of syphilis. See Diagnostic Tests, 6th ed. for more details concerning HIV and syphilis.

P. 642 added Childbirth Graphics address: PO Box 21207, Waco, TX 76702, (800) 299-3366.

P. 649 to the chart at the bottom of the page, a last line on the right has been added: Herbal sitz bath packs.

P. 651 under Miscellaneous supplies: 1 bottle of alcohol has been deleted and replaced with "1 bottle of echinacea tincture (cord care)

p. 654 in the middle of the page, the book title has been changed to How You Were Born by Joanna Cole.

P. 687 Headline above chart now reads 1 to 2 weeks gestation.

P. 688 in the chart, day 25 the bottom lines now read: 3 pairs of branchial arches.

Day 27, second line now reads: branchial arches

P. 765 **Is she undernourished?** now reads: Nutritional problems or even good basic nutrition which is inadequate for activity or stress levels may

lead to early labor. Once protein, calories and salt are evaluated, recommend 1000 mg of calcium citrate and 500 mg of magnesium after meals daily for women at mild risk and give a double divided dose for those at high risk of otherwise uncomplicated early labor.

P. 789 The last paragraph now reads: Review the discussion check list in the chapter entitled Books and Handouts in the section entitled An Overview of Prenatal Care for a review of topics to discuss.

P. 790 the first paragraph now reads: Third trimester development prepares the baby to live outside the uterus. Organs mature, particularly the brain, lungs, and nervous system. Fetal growth and weight gain is normally accelerated at this time. If a baby is having problems due to inadequate blood volume, genetics or other conditions, this will become apparent due to a lag in fetal growth during these weeks.

P. 819 last sentence in the first paragraph now begins: Valerie El Halta . . .

P. 832, first paragraph below bulleted items now reads: Differentially diagnose secondary symptoms to be sure it is metabolic toxemia. (Renal or neurological problems, certain tumors, lead poisoning and, *very* rarely, autoimmune reactions or other conditions may produce similar symptoms.)

P. 833, Tom Brewer can now be contacted at (802) 338-0276, 50 Buttolph Dr., # 201, Middlebury, VT 05753.

P. 843 another reference has been added to the references at the bottom of the page: Braun, Jennifer, Colorado licenced midwife, personal communication, 1994.

P. 849 **assess her diet** now reads: Discuss recent dietary patterns; a marginally contracted blood volume can precipitate early labor. Once protein, calories and salt are evaluated, recommend 1000 mg of calcium citrate and 500 mg of magnesium daily for women at mild risk and multiply this dose to two or three times daily for those at high risk.

P. 865, in the middle of the page, Beta-strep bullet now reads: *A *Beta*-strep culture can be done. This should be a regular culture which requires 24 hours for the first reading, as quick tests are too inaccurate. A sterile speculum exam is not necessary. A culture can be taken by swabbing inside

the lower third of the yoni. According to the CDC, another culture should be taken from the anorectum as well. Be sure no antibacterial perineal rinses have been used at the toilet before this test is done. More details on current CDC protocols for strep can be found in Diagnostic Tests.

P. 880, the fourth bullet down on the lower page now begins: *If, in spite of therapies, no uterine activity is present, have the mother do nipple stimulation starting at 38 weeks.

P. 881 delete top line of text (duplicate of last line on p. 880)

p. 882 a new reference has been added: McLean F, et al.: Postterm infants: too big or too small? Am J of Ob Gyn, 164(2), 1991, p. 619.

P. 899 next to last item in first list of bullets, second line, delete “cords”.

P. 905 four line from bottom of page, delete “visually”.

P. 924 under Risk Factors, fourth line from the bottom of the paragraph, change 1982 to 1985.

P. 954 three lines up from the bottom of the first paragraph, change the >1 to <1 (less than 1 cm). Last paragraph, second line should appear as <5 cm, then two more lines down, change >5 to <5.

P. 964 bullets changed or added to as follows:

- *Avoiding spicy foods as well as those a woman knows to be hard to digest or which produce gas and indigestion outside of pregnancy

- *Walking (not lying down) after meals to get digestion going

- *Not eating large meals late at night (or, eating only bland foods)

- *Drinking milk before, during and after meals

- *Taking any of the following supplements may help enhance digestion and/or neutralize heartburn:

 - *NF formula's liquid calcium/magnesium supplement, 1 tsp. to 1 Tbsp. as needed

 - *Tablets of comfrey with pepsin

- *Papaya enzymes (also eating raw papaya or drinking papaya juice may help)

 - *Digestive enzyme tablets

- *Slippery elm bark powder in capsules, as needed

 - *Plain baked potatoes

- *Thoroughly chewed raw almonds, cashews or filberts
- *A tablespoon of cream or milk may help by coating the stomach
- *Avoiding eating and drinking at the same time

p. 1056 the seonc paragraph now reads: More information about how to proceed with diagnosis and treatment is outlined in Diagnostic Tests. Once diagnosed, Uva Ursi-Plus TM (from Scientific Botanicals) can be used as an initial treatment (two capsules four times daily for three to five days and recheck). It contains mannose (the main sugar in cranberries) which attaches to bacteria and prevents it from adhering to the lining of the urinary tract.

P. 1082 this paragraph has been added to the end of the chapter: Note that toxic by-products produced by the breakdown of aspartame (NutraSweet) can lead to side-effects which mimic lupus and multiple sclerosis. Aspartame should be avoided whether or not a woman is pregnant.

P. 1128 The address at the bottom of the page has changed to 120 Wall St, New York, NY 10005.

P. 1129 the following line has been added to the end of the second paragraph: The toxins in aspartame (NutraSweet) can cause symptoms which mimic multiple sclerosis; these reverse when ingestion is discontinued.

2-3. Revisions that did not make it into the revised edition due to oversight:

P. 347 although this change is NOT noted in the revised edition, it has come to my attention that some practitioners suspect a link between the use of rubbing alcohol and cancer. Therefore, you may use any grain alcohol based antiseptic tincture or plain grain alcohol as a substitute for rubbing alcohol to cleanse the skin surface prior to puncture.

P. 1002 Pregnant women who do show glucose intolerance are often those with a family history of diabetes and a genetic tendency for their estrogen to bond to insulin in the presence of B₆ deficiency. These women often respond dramatically to 100 mg doses of B₆ three times daily which uncouples the estrogen and allows the insulin to be utilized. Because of the deficiency, this regime can be safely continued throughout pregnancy. (Wright, 1995)

Wright, J: Lecture on clinical nutrition, Conf. Amer. Assoc. Naturopathic Physicians, Snowmass, CO, with ref. to Adele Davis, 1995.