## **DAY CARE CENTERS:**

# RED LIGHT, GREEN LIGHT OR AMBER LIGHT

(ITS POTENTIAL DANGERS)

#### By

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1) The greatest potential danger applies to infants ranging in age from a few days or weeks to one and a half years

2) The second most endangered group (but less fundamentally so than the previous one) is those children between one and a half and two and a half to three years.

3) The potential damage that can accrue to children outside the two groups above is significantly reduced and will not be discussed here

4) The nature of the possible negative impact of Day-Care will be different according to:

a) The quality of the care provided in the Day Care Center

b) The time that the child remains in the Day Care Setting every day

c) The type of relationship between the infant and his parents in general

d) The amount of interaction between mother and infant, after he comes from the Day Care Center every day

e) The age of the child

To understand the potential dangers of Day Care Centers in the ages specified, you need to have some familiarity with the degree of immaturity of the brain at birth, and what it needs in order to develop ideally. I'll try to show you those facts

Once you understand that you can draw your own conclusions about Day Care as you see this program

- -An adult human brain weights 1200-1300 grams
- -At birth it only weights 300 to 350 grams
- -By two years it would have trebled in size, to 900 to 1050 grams (2/3 of the adult size) \*\*

-The brain has 100 billion neurons, all active at the same time

# Simplified Neuron

76 MIND MEETS MOLECULE

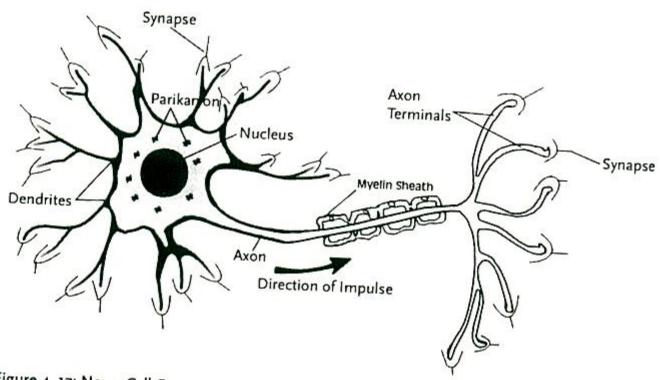
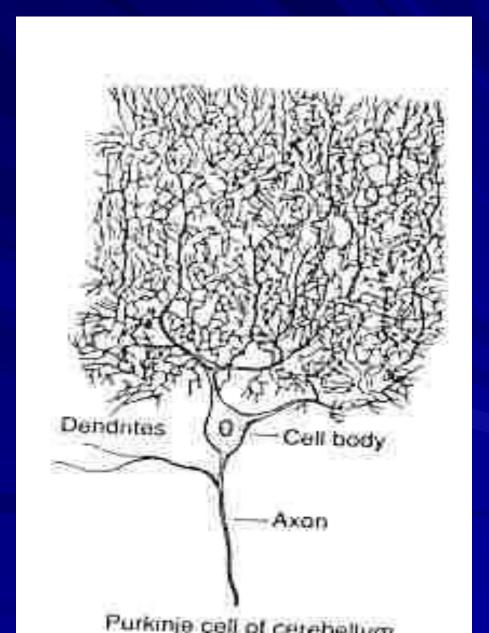


Figure 4-17: Nerve Cell Communication through Synapses

# Simplified Neuron



# Simplified Neuron



- -Each neuron establishes connections with 100,000 other neurons, with the total number of synaptic connection at 10 <sup>27</sup>
- -The number of possible combinations of synaptic connections is in the range of 10 1.000,000

- -Brain development never stops, at least not for as long as we are open to learning
- -By the same token, brain programming never stops. As Andreasen remarked in 2001 (1), "Each one of us is a unique person and has a unique brain primarily because each of us has had a different combination of life experiences that has shaped who we are"

(1) Andreasen, N. C. (2201), Brave New Brain, New York: Oxford Universities Press.

She continued: "Furthermore, as we live each minute of each day and each day of each year, we make choices that change our brains and ultimately change who we are. Our brains are constantly rewiring themselves..."

Three sets of variables need examination:

- 1) Coming from the Child
- 2) Type of environment, including the human objects that will care for him
- 3) Those resulting from the interaction between endowment and the environment

# 1) Coming from the Child:

- A) Immaturity of the brain at birth (the most immature of all mammals, ex of foal)
- B) Remember that the weight of brain at birth is only 300 to 350 grams
- C) Need of "environmental stimulation" in order to complete brain development ideally\*

#### WHAT DOES "ENVIRONMENTAL STIMULATION" DO?

- 1) Promotes dendritization of the neurons \*\*
- 2) Promotes vascularization in areas of the brain \*\*
- 3) Promotes myelinization \*\*
- 4) Promotes important biochemical and hormonal processes, in early infancy \*\*
- 5) Role of impoverished or enriched environments \*\*

## How the brain gets programmed?

- While the brain is developing and forming itself, it is at the same time being programmed, so that it can, in time, perform the functions of which it is capable (language example) \*\*
- The importance of the constancy of objects \*\*
- Problems with the multiplicity and quality of the care takers \*\*

### Other general considerations

- Physical facilities of the Day Care Center
- Number of staff (ratio staff to patient at the various ages). Laws regulating this facilities, etc
- Range of ages accepted?
- Who is the staff? Quality of training if any?
- How are they selected? Salaries?

# THE END QUESTIONS?

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